Ordinance No. 03-18

AN ORDINANCE OF THE CITY OF PULLMAN, WASHINGTON, RELATING TO CRITICAL AREAS AND RESOURCE LANDS, ADDING A NEW CHAPTER 16.50 TO THE PULLMAN MUNICIPAL CODE, AND REPEALING PULLMAN CITY ORDINANCE NO. 92-28 AND PROVIDING FOR OTHER MATTERS PROPERLY RELATED THERETO.

WHEREAS, the City Council of the city of Pullman did adopt, on September 1, 1992, Ordinance No. 92-28 in order to designate, classify, and regulate critical areas and designate resource lands within the city of Pullman in accordance with the Washington State Growth Management Act of 1990, as amended in 1991; and,

WHEREAS, the Washington State Growth Management Act, as amended, requires that each city take action to review and, if needed, revise its provisions regarding critical areas and resource lands to ensure that they comply with the provisions of the Act; and,

WHEREAS, in order to fulfill this requirement of the Washington State Growth Management Act, this Council now considers it in the best interests of the health, safety, and welfare of the city of Pullman to adopt new provisions regarding critical areas and resource lands and incorporate them as Chapter 16.50 of the Pullman City Code; now, therefore,

THE CITY COUNCIL OF THE CITY OF PULLMAN, WASHINGTON, DO ORDAIN AS FOLLOWS:

Section 1: There is hereby added a new Chapter 16.50 to the Pullman City Code to be titled CRITICAL AREAS AND RESOURCE LANDS.

Section 2: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.010 Purpose.

(1) The purpose of this Chapter is to designate and classify ecologically sensitive and hazardous areas and to protect these areas and their functions and values, while also allowing for reasonable use of private property.

(2) This Chapter is established to implement the goals, policies, guidelines, and requirements of the city of Pullman Comprehensive Plan and the Growth Management Act.

(3) The city finds that critical areas provide a variety of valuable and beneficial biological and physical functions that benefit the city and its residents, and/or may pose a threat to human safety or to public and private property.

The beneficial functions and values provided by critical areas include, but are not limited to, water quality protection and enhancement; fish and wildlife habitat; food chain support; flood storage; conveyance and attenuation; ground water recharge and discharge; erosion control; wave attenuation; protection from hazards; historical, archaeological, and aesthetic value protection; and recreation. These beneficial functions are not listed in order of priority.

(4) By identifying development impacts to critical areas, this Chapter seeks to:

(a) protect members of the public, public resources, and facilities from injury, loss of life, or property damage due to landslides and steep slope failures, erosion, seismic events, volcanic eruptions, or flooding;

(b) protect unique, fragile, and valuable elements of the environment, including ground and surface waters, wetlands, and fish and wildlife and their habitats;

(c) direct activities not dependent on critical area resources to less ecologically sensitive sites and mitigate unavoidable impacts to critical areas by regulating alterations in and adjacent to critical areas; and,

(d) prevent cumulative adverse environmental impacts to water quality, wetlands and fish and wildlife habitat, and the overall net loss of wetlands, frequently flooded areas and habitat conservation areas.

(5) This Chapter is intended to protect critical areas in accordance with the Growth Management Act and through the application of best available science, as determined according to WAC 365-195-900 through 365-195-925, and in consultation with state and federal agencies and other qualified professionals.

(6) This Chapter is to be administered with flexibility and attention to site-specific characteristics. It is not the intent of this Chapter to make a parcel of property unusable by denying its owner reasonable economic use of property.

(7) The city's enactment or enforcement of this Chapter shall not be construed for the benefit of any individual person or group of persons other than the general public.

Section 3: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.020 Authority and Applicability.

(1) The planning director is given the authority to administer and enforce the provisions of this Chapter to accomplish the stated purpose.

(2) The city shall not approve any development permit or subdivision, or otherwise issue any authorization to alter the condition of any land, water, or vegetation, or to construct or alter any structure or improvement in, over, or on a critical area of associated buffer, without first assuring compliance with the requirements of this Chapter.

(3) The provisions of this Chapter shall apply to all lands, all land uses and development activity, and all structures and facilities in the city, whether or not a development permit or other authorization is required and shall apply to every person, firm, partnership, corporation, group, governmental agency, or other entity that owns, leases, or administers land within the city. No person, company, agency, or applicant shall alter a critical area or buffer except as consistent with the purposes and requirements of this Chapter.

(4) Approval of a development permit pursuant to the provisions of this Chapter does not discharge the obligation of the applicant to comply with the provisions of this Chapter.

Section 4: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.030 Relationship to Other Regulations.

(1) These critical area regulations shall apply as an overlay to the city's zoning code (Title 17) and other applicable regulations adopted by the city, including but not limited to design standards, building code, shorelines management program, and State Environmental Policy Act (SEPA) procedures.

(2) These critical area regulations shall apply concurrently with review conducted under SEPA, as locally adopted.

(3) Any individual critical area adjoined by another type of critical area shall meet the requirements that provide the most protection to the critical areas involved. When any provision of this Chapter or any existing regulation, easement, covenant, or deed restriction conflicts with this

Chapter, that which provides more protection to the critical areas shall apply.

(4) Compliance with the provisions of this Chapter does not constitute compliance with other federal, state, and local regulations and permit requirements that may be required (for example, Shoreline Substantial Development Permits, HPA permits, Army Corps of Engineers Section 404 permits). The applicant is responsible for complying with these requirements, apart from the process established in this Chapter. Where applicable the planning director will encourage use of information such as permit applications to other agencies or special studies prepared in response to other regulatory requirements to support required documentation submitted for critical areas review.

Section 5: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.040 Administrative Procedures. The administrative procedures followed during the critical area review process shall conform to the standards of the city's zoning code (Title 17) and plats and subdivisions code (Title 13). This shall include, but not be limited to, timing and appeals associated with applications covered by this Chapter.

Section 6: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.050 Interpretation. In the interpretation and application of this ordinance, the provisions of this Chapter shall be considered to be the minimum requirements necessary, shall be liberally construed to serve the purpose of this ordinance, and shall be deemed to neither limit nor repeal any other provisions under state statute.

Section 7: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.060 Severability. If any clause, sentence, paragraph, section, or part of this Chapter or the application thereof to any person or circumstance shall be judged by any court of competent jurisdiction to be invalid, such order or judgment shall be confined in its operation to the controversy in which it was rendered. The decision shall not affect or invalidate the remainder of any part thereof and to this end the provisions of each clause, sentence, paragraph, section, or party of this law are hereby declared to be severable.

Section 8: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.070 Definitions. Words not defined in this Chapter shall be as defined in the following codes under this order of precedence: the Pullman City Code, the Revised Code of Washington (RCW), and the Washington Administrative Code (WAC). Words not found in any of these codes shall be as defined in the Webster's Third New International Dictionary, latest edition.

(1) Adaptive Management. Adaptive management relies on scientific methods to evaluate how well regulatory and non-regulatory actions protect the critical area. An adaptive management program is a formal and deliberate scientific approach to taking action and obtaining information in the face of uncertainty.

(2) Adjacent. Immediately adjoining (in contact with the boundary of the influence area) or within a distance that is less than that needed to separate activities from critical areas to ensure protection of the functions and values of the critical areas. Adjacent shall mean any activity or development located:

(a) on a site immediately adjoining a critical area;

(b) a distance equal to or less than the required critical area buffer width and building setback;

(c) a distance equal to or less than one-half mile (2,640 feet) from a bald eagle nest;

(d) a distance equal to or less than 200 feet upland from a stream, wetland, or water body;

(e) bordering or within the floodway, floodplain or channel migration zone; or

(f) a distance equal to or less than 200 feet from a critical aquifer recharge area.

(3) Advance Mitigation. Mitigation of an anticipated critical area impact or hazard completed according to an approved critical area report or other applicable information and prior to site development.

(4) Agricultural Land. Land primarily devoted to the commercial production of horticultural, viticultural, floricultural, dairy, apiary, vegetable, or animal products or of berries, grain, hay, straw, turf, seed, Christmas trees not subject to the excise tax imposed by RCW 84.33.100 through 84.33.140, or livestock, and that has

long-term commercial significance for agricultural production. [RCW 36.70A.030(3); WAC 365-190-030(1)].

(5) Alteration. Any human induced change in an existing condition of a critical area or its buffer. Alterations include, but are not limited to grading, filling, channelizing, dredging, clearing (vegetation), construction, compaction, excavation or any other activity that changes the character of the critical area.

(6) Applicant. A person who files an application for a development permit under this Chapter and who is either the owner of the land on which that proposed activity would be located, a contract purchaser, or the authorized agent of such a person.

(7) Aquifer. A geological formation, group of formations or part of formation that is capable of yielding a significant amount of water to a well or spring.

(8) Aquifer, Confined. An aquifer bounded above and below by beds of distinctly lower permeability than that of the aquifer itself and that contains ground water under sufficient pressure for the water to rise above the top of the aquifer.

(9) Aquifer Recharge Area. An area that, due to the presence of certain soils, geology, and surface water, acts to recharge ground water by percolation.

(10) Aquifer, Sole Source. An area designated by the U.S. Environmental Protection Agency under the Safe Drinking Water Act of 1974, Section 1424(e). The aquifer(s) must supply 50 percent or more of the drinking water for an area without a sufficient replacement available.

(11) Aquifer Susceptibility. The ease with which contaminants can move from the land surface to the aquifer based solely on the types of surface and subsurface materials in the area. Susceptibility usually defines the rate at which a contaminant will reach an aquifer unimpeded by chemical interactions with the vadose zone media.

(12) Aquifer, Unconfined. An aquifer not bounded above by a bed of distinctly lower permeability than that of the aquifer itself and containing ground water under pressure approximately equal to that of the atmosphere. This term is synonymous with the term "water table aquifer."

(13) Area of Shallow Flooding. An area designated AO, or AH Zone on the flood insurance map(s). The base flood depths

range from one to three feet; a clearly defined channel does not exist; the path of flooding is unpredictable and indeterminate; and, velocity flow may be evident. AO is characterized as sheet flow and AH indicates ponding.

(14) Base Flood. A flood event having a one percent chance of being equaled or exceeded in any given year, also referred to as the 100-year flood. Designations of base flood areas on flood insurance map(s) always include the letters A or V.

(15) Basement. Any area of the building having its floor below ground level on all sides.

(16) Best Available Science. Current scientific information used in the process to designate, protect, or restore critical areas, that is derived from a valid scientific process as defined by WAC 365-195-900 through 925. Some sources of best available science are included in "Citations of Recommended Sources of Best Available Science for Designating and Protecting Critical Areas" published by the Washington State Department of Community, Trade and Economic Development.

(17) Best Management Practices (BMPs). Conservation practices or systems of practices and management measures that:

(a) control soil loss and reduce water quality degradation caused by high concentrations of nutrients, animal waste, toxics, and sediment;

(b) minimize adverse impacts to surface water and ground water flow, circulation patterns, and to the chemical, physical, and biological characteristics of wetland;

(c) protect trees and vegetation designated to be retained during and following site construction; and

(d) provide standards for proper use of chemical herbicides within critical areas.

(18) Breakaway Wall. A wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces, without causing damage to the elevated portion of the building or supporting foundation system.

(19) Buffer or Buffer Zone. An area contiguous to a critical area that is required for the continued maintenance, functioning, and/or structural stability of a critical area.

(20) Channel Migration Zone (CMZ). The lateral extent of likely movement along a stream or river during the next one hundred years as determined by evidence of active stream channel movement over the past 100 years. Evidence of active movement over the 100-year time frame can be inferred from aerial photos or from specific channel and valley bottom characteristics. The time span typically represents the time it takes to grow mature trees that can provide functional large woody debris to streams. A CMZ is not typically present if the valley width is generally less than two bankfull widths, is confined by terraces, no current or historical aerial photographic evidence exists of significant channel movement, and there is no field evidence of secondary channels with recent scour from stream flow or progressive bank erosion at meander bends. Areas separated from the active channel by legally existing artificial channel constraints that limit bank erosion and channel avulsion without hydraulic connections shall not be considered within the CMZ.

(21) City. The city of Pullman, Washington.

(22) City Critical Area Maps. Maps maintained by the Pullman planning department that depict certified and suspected aquifer recharge areas, fish and wildlife habitat conservation areas, frequently flooded areas, geologically hazardous areas, and wetlands.

(23) Compensation Project. Actions necessary to replace project-induced critical area and buffer losses, including land acquisition, planning, construction plans, monitoring and contingency actions.

(24) Compensatory Mitigation. Replacing project-induced wetland losses or impacts, and includes, but is not limited to, the following:

(a) Restoration. Actions performed to reestablish wetland functional characteristics and processes that have been lost by alterations, activities, or catastrophic events within an area that no longer meets the definition of a wetland.

(b) Creation. Actions performed to intentionally establish a wetland at a site where it did not formerly exist.

(c) Enhancement. Actions performed to improve the condition of existing degraded wetlands so that the functions they provide are of a higher quality.

(d) Preservation. Actions taken to ensure the permanent protection of existing, high-quality wetlands.

(25) Conservation Easement. A legal agreement that the property owner enters into to restrict uses of the land. Such restrictions can include, but are not limited to, passive recreation uses such as trails or scientific uses and fences or other barriers to protect habitat. The easement is recorded on a property deed, runs with the land, and is legally binding on all present and future owners of the property, therefore, providing permanent or long-term protection.

(26) Critical Aquifer Recharge Area (CARA). An area designated by WAC 365-190-080(2) that is determined to have a critical recharging effect on aquifers used for potable water as defined by WAC 365-190-030(2).

(27) Critical Area Maps, City. See "City Critical Area Maps."

(28) Critical Areas. Critical areas include any of the following areas or ecosystems: aquifer recharge areas, fish and wildlife habitat conservation areas, frequently flooded areas, geologically hazardous areas, and wetlands, as defined in RCW 36.70A and this Chapter.

(29) Critical Facility. A facility for which even a slight chance of flooding, inundation, or impact from a hazard event might be too great. Critical facilities include, but are not limited to, schools, nursing homes, hospitals, police, fire and emergency response installations, and installations that produce, use or store hazardous materials or hazardous waste.

(30) Department. The city of Pullman planning department.

(31) Developable Area. A site or portion of a site that may be utilized as the location of development, in accordance with the rules of this Chapter.

(32) Development. Any activity upon the land consisting of construction or alteration of structures, earth movement, dredging, dumping, grading, filling, mining, removal of any sand, gravel, or minerals, driving of piles, drilling operations, bulkheading, clearing of vegetation, or other land disturbance. Development includes the storage or use of equipment or materials inconsistent with the existing

use. Development also includes approvals issued by the city that binds land to specific patterns of use, including but not limited to, subdivisions, short subdivisions, zone changes, conditional use permits, and binding site plans. Development activity does not include the following activities:

(a) interior building improvements;

(b) exterior structure maintenance activities, including painting and roofing;

(c) routine landscape maintenance of established, ornamental landscaping, such as lawn mowing, pruning and weeding; or,

(d) maintenance of the following existing facilities that does not expand the affected area: septic tanks (routine cleaning); wells; individual utility service connections; and individual cemetery plots in established and approved cemeteries.

(33) Development Permit. Any permit or approval issued by the city or other authorized agency for construction, land use, or the alteration of land.

(34) Elevated Building. A building that has no basement and its lowest elevated floor is raised above ground level by foundation walls, shear walls, post, piers, pilings, or columns.

(35) Emergent Wetland. A wetland with at least 30 percent of the surface area covered by erect, rooted, herbaceous vegetation extending above the water surface as the uppermost vegetative strata.

(36) Erosion. The process whereby wind, rain, water, and other natural agents mobilize and transport particles.

(37) Erosion Hazard Areas. Those areas identified by the United State Department of Agriculture National Resources Conservation Service as having a "severe" rill and inter-rill erosion hazard.

(38) Exotic. Any species of plants or animals that are foreign to the planning area.

(39) Final Project Approval. An approval granted by the city to establish that a particular land use development activity has been completed in conformity with applicable regulations; examples of a final project approval include a final certificate of occupancy or final plat approval.

(40) Fish and Wildlife Habitat Conservation Areas. Areas necessary for maintaining species in suitable habitats within their natural geographic distribution so that isolated subpopulations are not created as designated by WAC 365-190-080(5). **These areas include:**

(a) areas with which state or federally designated endangered, threatened, and sensitive species have a primary association;

(b) habitats of local importance, including but not limited to areas designated as priority habitat by the Department of Fish and Wildlife;

(c) naturally occurring ponds under 20 acres and their submerged aquatic beds that provide fish or wildlife habitat, including those artificial ponds intentionally created from dry areas in order to mitigate impacts to ponds;

(d) waters of the state, including lakes, rivers, ponds, streams, inland waters, underground waters, salt waters and all other surface waters and watercourses within the jurisdiction of the state of Washington;

(e) lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity;

(f) state natural area preserves and natural resource conservation areas; and

(g) land essential for preserving connections between habitat blocks and open spaces.

(41) Fish Habitat. Habitat that is used by fish at any life stage at any time of the year, including potential habitat likely to be used by fish that could be recovered by restoration or management and includes off-channel habitat.

(42) Flood Fringe. Land area that is outside the floodway of a stream, but is subject to periodic inundation due to flooding, associated with a regulatory flood.

(43) Flood or Flooding. A general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland waters and/or the unusual and rapid accumulation of runoff of surface waters from any source.

(44) Flood Insurance Map. The official map on which the Federal Insurance Administration has delineated the areas of special flood hazards and include the risk premium zones

applicable to the community. Also known as "Flood Insurance Rate Map" or "FIRM."

(45) Flood Insurance Study. The official report provided by the Federal Insurance Administration that includes flood profiles, the Flood Boundary-Floodway Map, and the water surface elevation of the base flood.

(46) Floodplain. The total land area adjoining a river, stream, watercourse or lake subject to inundation by the base flood.

(47) Flood Protection Elevation. The elevation that is one foot above the base flood elevation.

(48) Flood Resistant Material. Material designed to be resistant to the impacts associated with flooding and defined and described in detail in FEMA Technical Bulletin #2-93, dated April 1993 and FEMA publication FEMA-348, *"Protecting Building Utilities from Flood Damage."*

(49) Floodway. The channel of a river or other watercourse and the adjacent land area that must be reserved in order to discharge the base flood without cumulatively increasing the surface water elevation more that one foot. Also known as the "zero rise floodway."

(50) Forest Land. Land primarily useful for growing trees, including Christmas trees subject to the excise tax imposed under RCW 84.33.100 through 84.33.140, for commercial purposes, and that has long-term commercial significance for growing commercially. [RCW 36.70A.030(8); WAC 365.191-030(6)].

(51) Forested Wetland. A wetland with at least 30 percent of the surface area covered by woody vegetation greater than 20 feet in height that is at least partially rooted within the wetland.

(52) Formation. An assemblage of earth materials grouped together into a unit that is convenient for description or mapping.

(53) Formation, Confining. The relatively impermeable formation immediately overlying a confined aquifer.

(54) Frequently Flooded Areas. Lands in the floodplain subject to a one percent or greater chance of flooding in any given year and those lands that provide important flood storage, conveyance and attenuation functions, as determined by the Director of Public Works in accordance with WAC 365-190-080(3). Frequently flooded areas perform important

hydrologic functions and may present a risk to persons and property. Classifications of frequently flooded areas include, at a minimum, the 100-year floodplain designations of the Federal Emergency Management Agency and the National Flood Insurance Program.

(55) Functions and Values. The beneficial roles served by critical areas including, but not limited to, water quality protection and enhancement, fish and wildlife habitat, food chain support, flood storage, conveyance and attenuation, ground water recharge and discharge, erosion control, wave attenuation, protection from hazards, historical and archaeological and aesthetic value protection, and recreation. These beneficial roles are not listed in order of priority.

(56) Geologically Hazardous Areas. Areas that may not be suited to development consistent with public health, safety or environmental standards, because of their susceptibility to erosion, sliding, earthquake, or other geological events as designated by WAC 365-190-080(4). Types of geologically hazardous areas include: erosion, landslide, seismic, mine, and volcanic hazards.

(57) Ground Water. Water in a saturated zone or stratum beneath the surface of land or a surface water body.

(58) Ground Water Perched. Ground water in a saturated zone that is separated from the underlying main body of ground water by an unsaturated rock zone.

(59) Growth Management Act. RCW 36.70A, 36.70B, and 36.70C as amended.

(60) Habitat Conservation Areas. Areas designated as fish and wildlife habitat conservation areas.

(61) Hazard Areas. Areas designated as frequently flooded areas or geologically hazardous areas due to potential for erosion, landslide, seismic activity, mine collapse, or other geological condition.

(62) Hazardous Substances. Any liquid, solid, gas, or sludge, including any material, substance, product, commodity, or waste, regardless of quantity, that exhibits any of the physical, chemical or biological properties described in WAC 173-303-090 or 173-303-100.

(63) High Intensity Land Use. Land uses which are associated with high levels of human disturbance or substantial habitat impacts including, but not limited to, commercial

uses, industrial uses, and residential uses with five or more dwelling units per acre.

(64) High Quality Wetlands. Those wetlands that meet the following criteria:

(a) no, or isolated, human alteration of the wetland topography;

(b) no human-caused alteration of the hydrology or the wetland appears to have recovered from the alteration;

(c) low cover and frequency of exotic plant species;

(d) relatively little human-related disturbance of the native vegetation, or recovery from past disturbance;

(e) if the wetland system is degraded, it still contains a viable and high quality example of a native wetland community; and

(f) no known major water quality problems.

(65) Historic Condition. Condition of the land, including flora, fauna, soil, topography, and hydrology that existed before the area and vicinity were developed or altered by human activity.

(66) Hydraulic Project Approval (HPA). A permit issued by the state Department of Fish and Wildlife for modifications to waters of the state in accordance with Chapter 75.20 RCW.

(67) Hydric Soil. A soil that is saturated, flooded or ponded long enough during the growing season to develop anaerobic conditions in the upper part. The presence of hydric soil shall be determined following the methods described in the *Washington State Wetland Identification and Delineation Manual*.

(68) Hydrologic Soil Groups. Soils grouped according to their runoff-producing characteristics under similar storm and cover conditions. Properties that influence runoff potential are depth to seasonally high water table, intake rate and permeability after prolonged wetting, and depth to a low permeable layer. Hydrologic soil groups are normally used in equations that estimate runoff from rainfall, but can be used to estimate a rate of water transmission in soil. There are four hydrologic soil groups:

(a) low runoff potential and a high rate of infiltration potential;

(b) moderate infiltration potential and a moderate rate of runoff potential;

(c) slow infiltration potential and a moderate to high rate of runoff potential; and

(d) high runoff potential and very slow infiltration and water transmission rates.

(69) Hydrophytic Vegetation. Macrophytic plant life growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content. The presence of hydrophytic vegetation shall be determined following the methods described in the *Washington State Wetland Identification and Delineation Manual*.

(70) Hyporheic Zone. The saturated zone located beneath and adjacent to streams that contains some portion of surface waters, serves as a filter for nutrients, and maintains water quality.

(71) Impervious Surface. A hard surface area that either prevents or retards the entry of water into the soil mantle as under natural conditions prior to development or that causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under natural conditions prior to development. Common impervious surfaces include, but are not limited to, roof tops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, gravel roads, packed earthen materials, and oiled macadam or other surfaces which similarly impede the natural infiltration of stormwater.

(72) Infiltration. The downward entry of water into the immediate surface of soil.

(73) Injection Well.

(a) Class I: A well used to inject industrial, commercial, or municipal waste fluids beneath the lowermost formation containing, within one-quarter mile (1,320 feet) of the well bore, an underground source of drinking water.

(b) Class II: A well used to inject fluids:

(i) brought to the surface in connection with conventional oil or natural gas exploration or production and may be commingled with wastewaters from gas plants that are an integral part of production operations, unless those waters are classified as dangerous wastes at the time of injection;

(ii) for enhanced recovery of oil or natural gas; or

(iii) for storage of hydrocarbons that are liquid at standard temperature and pressure.

(c) Class III: A well used for extraction of minerals, including but not limited to the injection of fluids for:

(i) in-situ production of uranium or other metals that have not been conventionally mined;

(ii) mining of sulfur by Frasch process; or

(iii) solution mining of salts or potash.

(d) Class IV: A well used to inject dangerous or radioactive waste fluids.

(e) Class V: All injection wells not included in Classes I, II, III, or IV.

(74) In-kind Compensation. To replace critical areas with substitute areas whose characteristics and functions closely approximate those destroyed or degraded by a regulated activity. The determination of in-kind versus out-of-kind compensation for wetlands is dependent upon equivalency in wetland functions, not wetland categories.

(75) Inter-rill. An area subject to sheetwash.

(76) Isolated Wetlands. Those wetlands that are outside of and not contiguous to any 100-year floodplain of a lake, river, or stream, and have no contiguous hydric soil or hydrophytic vegetation between the wetland and any surface water.

(77) Joint Aquatic Resource Permits Application (JARPA). A single application form that may be used to apply for hydraulic project approvals, shoreline management permits, water quality certifications, Coast Guard bridge permits, Department of Natural Resources use authorization, and Army Corps of Engineers permits.

(78) Land Use, High Intensity. See "High Intensity Land Use."

(79) Land Use, Low Intensity. See "Low Intensity Land Use."

(80) Landslide Hazard Areas. Areas that are potentially subject to risk of mass movement due to a combination of geologic landslide resulting from a combination of geologic, topographic, and hydrologic factors. These areas are typically susceptible to landslides because of a combination of factors including: bedrock, soil, slope

gradient, slope aspect, geologic structure, ground water, or other factors.

(81) Long-term Commercial Significance. Includes the growing capacity, productivity, and soil composition of the land for long-term commercial production, in consideration with the land's proximity to population areas, and the possibility of more intense uses of the land. [RCW 36.70A.030(10); WAC 365-190-030(11)].

(82) Low Intensity Land Use. A land use that is associated with low levels of human disturbance or low habitat impacts, including, but not limited to, passive recreation uses, open space uses, and residential uses with less than five dwelling units per acre.

(83) Lowest Floor. The lowest floor of the lowest enclosed area, including the basement. An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage, in an area other than a basement area, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable requirements of this Chapter.

(84) Mine Hazard Areas. Areas that are underlain by, adjacent to, or affected by mine workings such as adits, gangways, tunnels, drifts, or airshafts, and those areas of probable sink holes, gas releases, or subsidence due to mine workings. Factors that should be considered include: proximity to development, depth from ground surface to the mine working, and geologic material.

(85) Mineral Resource Lands. Land primarily devoted to the extraction of minerals or that have known potential long-term commercial significance for the extraction of minerals. [WAC 365-191-040(14)].

(86) Minerals. Materials including gravel, sand, and valuable metallic substances. [RCW 36.70A.030(11); WAC 365-190-030(12)].

(87) Mitigation. Avoiding, minimizing or compensating for adverse critical areas impacts. Mitigation, in the following order of preference, is:

(a) avoiding the impact altogether by not taking a certain action or parts of an action;

(b) minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using

appropriate technology, or by taking affirmative steps, such as project redesign, relocation, or timing, to avoid or reduce impacts;

(c) rectifying the impact to wetlands, critical aquifer recharge areas, and habitat conservation areas by repairing, rehabilitating or restoring the affected environment to the conditions existing at the time of the initiation of the project;

(d) minimizing or eliminating the hazard by restoring or stabilizing the hazard area through engineered or other methods;

(e) reducing or eliminating the impact or hazard over time by preservation and maintenance operations during the life of the action;

(f) compensating for the impact to wetlands, critical aquifer recharge areas, and habitat conservation areas by replacing, enhancing, or providing substitute resources or environments; and

(g) monitoring the hazard or other required mitigation and taking remedial action when necessary.

Mitigation for individual actions may include a combination of the above measures.

(88) Monitoring. Evaluating the impacts of development proposals on the biological, hydrological, and geological elements of such systems and assessing the performance of required mitigation measures throughout the collection and analysis of data by various methods for the purpose of understanding and documenting changes in natural ecosystems and features, and includes gathering baseline data.

(89) Native Vegetation. Plant species that are indigenous to the area in question.

(90) Native Growth Habitat Area. An area where native vegetation is preserved for the purpose of preventing harm to property and the environment, including, but not limited to, controlling surface water runoff and erosion, maintaining slope stability, buffering and protecting plants and animal habitat.

(91) Natural Waters. Waters, excluding water conveyance systems that are artificially constructed and actively maintained for irrigation.

(92) Non-conformity. A legally established existing use or legally constructed structure that is not in compliance with current regulations.

(93) Non-indigenous. See "Exotic."

(94) Off-site Compensation. To replace critical areas away from the site on which a critical area has been impacted.

(95) On-site Compensation. To replace critical areas at or adjacent to the site on which a critical areas has been impacted.

(96) Ordinary High Water Mark (OHWM). That mark which is found by examining the bed and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, that the soil has a character distinct from that of the abutting upland in respect to vegetation.

(97) Out-of-kind Compensation. To replace critical areas with substitute critical areas whose characteristics do not closely approximate those destroyed or degraded. The determination of in-kind versus out-of-kind compensation for wetlands is dependent upon equivalency in wetland functions, not wetland categories.

(98) Perched Ground Water. See "Ground Water, Perched."

(99) Permeability. The capacity of an aquifer or confining bed to transmit water. It is a property of the aquifer or confining bed and is independent of the force causing movement.

(100) Planning Director. The city of Pullman planning director, or other city staff member designated to act on behalf of the planning director.

(101) Porous Soil Types. Soils, as identified by the National Resources Conservation Service, U.S. Department of Agriculture, that contain voids, pores, interstices or other openings which allow the passing of water.

(102) Potable Water. Water that is safe and palatable for human use.

(103) Practical Alternative. An alternative that is available and capable of being carried out after taking into consideration, cost, existing technology, and logistics in light of overall project purposes, and having less impacts to critical areas.

(104) Priority Habitat. Habitat type or elements with unique or significant value to one or more species as classified by

the Department of Fish and Wildlife. A priority habitat may consist of a unique vegetation type or dominant plant species, a described successional stage, or a specific structural element. [WAC 173-26-020(34)]

(105) Project Area. All areas within 50 feet of the area proposed to be disturbed, altered, or used by the proposed activity or the construction of any proposed structures.

(106) Qualified Professional. A person with experience and training in the pertinent scientific discipline, and who is a qualified scientific expert with expertise appropriate for the relevant critical area subject in accordance with WAC 365-195-905(4). A qualified professional must have obtained a bachelor's or equivalent degree in biology, engineering, environmental studies, fisheries, geomorphology or a related field, and two years of related work experience.

(a) A qualified professional for habitat conservation areas or wetlands must have a degree in biology or a related field, and professional experience related to the subject habitat and/or species.

(b) A qualified professional for geologically hazardous areas must be a professional geologist (preferred) or engineer, licensed in the state of Washington.

(c) A qualified professional for critical aquifer recharge areas must be a hydrogeologist, geologist, engineer, or other scientist with experience in preparing hydrogeologic assessments.

(107) Reasonable Use. A use or activity that allows the landowner to realize a reasonable return on the property or make a productive use of the property. Denial of a reasonable return does not mean merely a reduction in value of the land, or a lack of a profit on the purchase and sale of the property, but rather it means there can be no beneficial use of the property once the provisions of this Chapter have been applied to the property.

(108) Recharge. The process involved in the absorption and addition of water to ground water.

(109) Reclaimed Water. Municipal wastewater effluent that has been adequately and reliability treated so that it is suitable for beneficial use. Following treatment it is no longer considered wastewater (treatment levels and water quality requirements are given in the water reclamation and

reuse standards adopted by the state Departments of Ecology and Health).

(110) Recreation Vehicle. A vehicle that is:

(a) built on a single chassis;

(b) 400 square feet or less when measured at the largest horizontal projection;

(c) designed to be self-propelled or permanently towable by a light duty truck; and

(d) designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

(111) Repair or Maintenance. An activity that restores the character, scope, size, and design of a serviceable area, structure, or land use to its previously authorized and undamaged condition. Activities that change the character, size, or scope of a project beyond the original design and drain, dredge, fill, flood, or otherwise alter critical areas are not included in this definition.

(112) Restoration. Measures taken to restore an altered or damaged natural feature including:

(a) active steps taken to restore damaged wetlands, streams, protected habitat, or their buffers to the functioning condition that existed prior to an unauthorized alteration; and

(b) actions performed to reestablish structural and functional characteristics of the critical area that have been lost by alteration, past management activities, or catastrophic events.

(113) Rills. Steep-sided channels resulting from accelerated erosion. A rill is generally a few inches deep and not wide enough to be an obstacle to farm machinery. Rill erosion tends to occur on slopes, particularly steep slopes with poor vegetative cover.

(114) Riparian Habitat. Areas adjacent to aquatic systems with flowing water that contain elements of both aquatic and terrestrial ecosystems that mutually influence each other. The width of these areas extends to that portion of the terrestrial landscape that directly influences the aquatic ecosystem by providing shade, fine or large woody material, nutrients, organic and inorganic debris, terrestrial insects, or habitat for riparian-associated wildlife. Widths shall be measured from the ordinary high water mark

or from the top of bank if the ordinary high water mark cannot be identified. It includes the entire extent of the floodplain and the extent of vegetation adapted to wet conditions as well as adjacent upland plant communities that directly influence the stream system. Riparian habitat areas include those riparian areas severely altered or damaged due to human development activities.

(115) Scientific Process. A valid scientific process is one that produces reliable information useful in understanding the consequences of a decision. The characteristics of a valid scientific process are as follows:

(a) Peer review. The information has been critically reviewed by other qualified scientific experts in that scientific discipline.

(b) Methods. The methods that were used are standardized in the pertinent scientific discipline or the methods have been appropriately peer-reviewed to assure their reliability and validity.

(c) Logical conclusions and reasonable inferences. The conclusions presented are based on reasonable assumptions supported by other studies and are logically and reasonably derived from the assumptions and supported by the data presented.

(d) Quantitative analysis. The data have been analyzed using appropriate statistical or quantitative methods.

(e) Context. The assumptions, analytical techniques, data, and conclusions are appropriately framed with respect to the prevailing body of pertinent scientific knowledge.

(f) References. The assumptions, techniques, and conclusions are well referenced with citations to pertinent existing information.

(116) Scrub-shrub Wetland. A wetland with at least 30 percent of its surface area covered by woody vegetation less than 20 feet in height as the uppermost strata.

(117) Section 404 Permit. A permit issued by the Army Corps of Engineers for the placement of dredge or fill material or clearing in waters of the United States, including wetlands, in accordance with 33 USC § 1344.

(118) Seep. A spot where water oozes from the earth, often forming the source of a small stream.

(119) Seismic Hazard Areas. Areas that are subject to severe risk of damage as a result of earthquake-induced ground shaking, slope failure, settlement, or soil liquefaction.

(120) Serviceable. Presently usable.

(121) Shorelines. All of the water areas of the state as defined in RCW 90.58.030, including reservoirs and their associated shorelands, together with the lands underlying them except:

(a) shorelines of statewide significance;

(b) shorelines on segments of streams upstream of a point where the mean annual flow is 20 cubic feet per second or less and the wetlands associated with such upstream segments; and

(c) shorelines on lakes less than 20 acres in size and wetlands associated with such small lakes.

(122) Shorelines of the State. The total of all "shorelines," as defined in RCW 90.58.030(2)(d), and "shorelines of statewide significance" within the state, as defined in RCW 90.58.030(2)(c).

(123) Shorelines of Statewide Significance. Those areas defined in RCW 90.58.030(2)(e).

(124) Shorelands or Shoreland Areas. Those lands extending landward for 200 feet in all directions as measured on a horizontal plane from the ordinary high water mark; floodways and contiguous floodplain areas landward 200 feet from such floodways; and all wetlands and river deltas associated with the streams, lakes and tidal waters which are subject to the provisions of Chapter 90.58 RCW.

(125) Significant Portion of its Range. That portion of a species range likely to be essential to the long-term survival of the population in Washington.

(126) Soil Survey. The most recent soil survey for the local area or county by the National Resources Conservation Service, U.S. Department of Agriculture.

(127) Special Protection Areas. Aquifer recharge areas defined by WAC 173-200-090 that require special consideration or increased protection because of unique characteristics, including, but not limited to:

(a) ground waters that support an ecological system requiring more stringent criteria than drinking water standards;

(b) ground water recharge areas and wellhead protection areas, that are vulnerable to pollution because of hydrogeologic characteristics; and

(c) sole source aquifer status.

(128) Sole Source Aquifer. See "Aquifer, Sole Source."

(129) Species. Any group of animals classified as a species or subspecies as commonly accepted by the scientific community.

(130) Species, Endangered. Any fish, wildlife, or plant species that is threatened with extinction throughout all or a significant portion of its range and is listed by the state or federal government as an endangered species.

(131) Species of Local Importance. Those species of local concern due to their population status or their sensitivity to habitat manipulation, or that are game species.

(132) Species, Priority. Any fish or wildlife species requiring protective measures and/or management guidelines to ensure their persistence as genetically viable population levels as classified by the Department of Fish and Wildlife, including endangered, threatened, sensitive, candidate and monitor species, and those of recreational, commercial, or tribal importance.

(133) Species, Threatened. Any fish, wildlife, or plant species that is likely to become an endangered species within the foreseeable future throughout a significant portion of its range without cooperative management or removal of threats, and is listed by the state or federal government as a threatened species.

(134) State Environmental Policy Act (SEPA). Washington State Environmental Policy Act, Chapter 43.21C RCW.

(135) Stream. Water contained within a channel, either perennial or intermittent, and classified according to WAC 222-16-030 or WAC 222-16-031. Streams also include natural watercourses modified by man. Streams do not include irrigation ditches, waste ways, drains, outfalls, operational spillways, channels, storm water runoff facilities or other wholly artificial watercourses, except those that directly result from the modification to a natural watercourse.

(136) Sub-drainage Basin or Subbasin. The drainage area of the highest order stream containing the subject property impact area. Stream order is the term used to define the position

of a stream in the hierarchy of tributaries in the watershed. The smallest streams are the highest order (first order) tributaries. These are the upper watershed streams and have no tributaries of their own. When two first order streams meet, they form a second order stream, and when two second order streams meet they become a third order stream, and so on.

(137) Substantial Damage. Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

(138) Substantial Improvement. Any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure either: a) before the improvement or repair is started; or b) if the structure has been damaged and is being restored, before the damage occurred.

(139) Unavoidable. Adverse impacts that remain after all appropriate and practicable avoidance and minimization have been achieved.

(140) Vulnerability. The combined effect of susceptibility to contamination and the presence of potential contaminants.

(141) Water Dependent. A use or portion of a use that cannot exist in a location that is not adjacent to the water, but is dependent on the water by reason of the intrinsic nature of its operations. A use that can be carried out only on, in, or adjacent to water. Examples of water dependent uses include ship cargo terminal loading areas; fishing; ferry and passenger terminals; barge loading, ship building, and dry docking facilities; marinas, moorage, and boat launching facilities; aquaculture; float plane operations; surface water intake; and sanitary sewer and storm drain outfalls.

(142) Water Resource Inventory Area (WRIA). One of 62 watersheds in the state of Washington, each composed of the drainage areas of a stream or streams, as established in Chapter 173-500 WAC as it existed on January 1, 1997.

(143) Water Table. That surface in an unconfined aquifer at which the pressure is atmospheric. It is defined by the levels at which water stands in wells that penetrate the aquifer just far enough to hold standing water.

(144) Water Table Aquifer. See "Aquifer, Unconfined."

(145) Water Typing System. Waters classified according to WAC 222-16-031, as amended.

(146) Well. A bored, drilled or driven shaft, or a dug hole whose depth is greater that the largest surface dimension for the purpose of withdrawing or injecting water or other liquids.

(147) Wellhead Protection Area (WHPA). The portion of a zone of contribution for a well, wellfield or spring, as defined using criteria established by the state Department of Ecology.

(148) Wetlands. Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from non-wetland areas to mitigate the conversion of wetlands. For identifying and delineating a wetland, local government shall use the Washington State Wetland Identification and Delineation Manual.

(149) Wetland Classes, Classes of Wetlands, or Wetland Types. The descriptive classes of the wetlands taxonomic classification system of the U.S. Fish and Wildlife Service (Cowardin, et al. 1979).

(150) Wetland Edge. The boundary of a wetland as delineated based on the definitions contained in this Chapter.

(151) Wetlands Mitigation Bank. A site where wetlands are restored, created, enhanced, or in exceptional circumstances, preserved expressly for the purpose of providing compensatory mitigation in advance of authorized impacts to similar resources.

(152) Zone of Contribution. The area surrounding a well or spring that encompasses all areas or features that supply ground water recharge to the well or spring.

Section 9: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.080 Jurisdiction—Critical Areas.

(1) The city shall regulate all uses within 200 feet of, or that are likely to affect, one or more critical areas, consistent with the best available science and the provisions contained within this Chapter.

(2) Critical areas regulated by this Chapter include:

(a) wetlands;

(b) critical aquifer recharge areas;

(c) frequently flooded areas;

(d) geologically hazardous areas; and

(e) fish and wildlife habitat conservation areas.

(3) All areas within the city meeting the definition of one or more critical areas, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this Chapter.

Section 10: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.090 Protection of Critical Areas. Any action taken pursuant to this Chapter shall result in equivalent or greater functions and values of the critical areas associated with the proposed action, as determined by the best available science. All actions and developments shall be designed and constructed in accordance with the mitigation sequencing requirements in Section 16.50.170 to avoid, minimize and restore all adverse impacts. Applicants must first demonstrate an inability to avoid or reduce impacts before restoration and compensation of impacts will be allowed. No activity or use shall be allowed that results in a net loss of the functions or values of critical areas.

Section 11: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.100 Best Available Science.

(1) Best Available Science Must Be Consistent with Criteria. The best available science is that scientific information applicable to the critical area prepared by local, state or federal natural resource agencies, a qualified scientific

professional or team of qualified scientific professionals, that is consistent with criteria established in WAC 365-195-900 through WAC 365-195-925. In the context of critical areas protection, best available science must also be based upon a valid scientific process as defined in WAC 365-195-905. Best available science sources are available in records maintained by the department.

(2) Absence of Valid Scientific Information. Where there is an absence of valid scientific information or incomplete scientific information relating to a critical area, leading to uncertainty about the specific boundary of a critical area, and risk to critical area function of permitting an alteration of or impact to the critical area, the planning director shall:

(a) Take a "precautionary or a no-risk approach," that strictly limits development and land use activities until the uncertainty is sufficiently resolved;

(b) Require an effective adaptive management program that relies on scientific methods to evaluate how well regulatory and non-regulatory actions protect the critical area. An adaptive management program is a formal and deliberate scientific approach to taking action and obtaining information in the face of uncertainty. An adaptive management program shall:

(i) address funding for the research component of the adaptive management program;

(ii) change course based on the results and interpretation of new information that resolves uncertainties;

(iii) commit to the appropriate time frame and scale necessary to reliably evaluate regulatory and non-regulatory actions affecting protection of critical areas; and

(c) Maintain a critical areas designation certification program for wetlands and habitat conservation areas by periodically updating the city critical area maps with new information as it is provided to the city. Currently the city has two types of boundaries depicted on the wetlands and habitat conservation area maps:

(i) Certified. Where the critical area boundary has been verified and mapped by a qualified

professional (e.g. delineated wetland) and this information has been provided to the city.

(ii) Uncertified. Where more specific information needs to prepared by a qualified professional and provided to the city to accurately show the boundary of a given critical area.

The most recent city critical area map revision identifying certified and uncertified wetlands and habitat conservation areas becomes the map of record for demonstrating compliance with the state requirement for designating and classifying these critical areas.

Section 12: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.110 Allowed Activities.

(1) Process. The planning director shall allow activities that are verified to comply with this Chapter. Documentation of allowed activities shall be maintained on file at the department.

(2) Allowed Activities Shall Avoid Impacts to Critical Areas. All allowed activities shall use reasonable methods to avoid potential impacts to critical areas, using best management practices that result in the least amount of impact to the critical areas where practicable. Designation as an allowed activity does not give permission to degrade a critical area or ignore risk from natural hazards. Best management practices shall be used for tree and vegetation protection, construction management, erosion and sedimentation control, water quality protection, and regulation of chemical applications. The city shall observe the use of best management practices to ensure that the activity does not result in degradation to the critical area. Any incidental damage to, or alteration of, a critical area that is not a necessary outcome of the exempted activity shall be restored, rehabilitated, or replaced at the responsible party's expense.

(3) Allowed Activities. The activities identified in this Subsection are allowed in or near critical areas and shall be exempt from the standards of this Chapter as qualified for each individual activity cited, provided they are

otherwise consistent with applicable local, state, and federal laws. If a proposed or unauthorized activity does not meet the qualifications specified for that activity in this Subsection, it shall be addressed through the general review procedures set forth in Section 16.50.130 or the enforcement provisions set forth in Section 16.50.220, as applicable. Allowed activities are as follows:

(a) Emergencies. Emergency activities are those activities necessary to prevent an immediate threat to public health, safety, or welfare, or that pose an immediate risk of damage to private property and that require remedial or preventative action in a time frame too short to allow for compliance with the requirements of this Chapter. Emergency actions that create an impact to a critical area or its buffer shall use reasonable methods to address the emergency; in addition, they must have the least possible impact to the critical area or its buffer. The person or agency undertaking such action shall notify the planning director within one working day following commencement of the emergency activity. Within 30 days, the planning director shall determine if the action taken was within the scope of the emergency actions allowed in this Paragraph. If the planning director determines that the action taken, or any part of the action taken, was beyond the scope of an allowed emergency action, then enforcement provisions of Section 16.50.220 shall apply. After the emergency, the person or agency undertaking the action shall fully restore and/or mitigate any impacts to the critical area and buffers resulting from the emergency action in accordance with the critical area report and mitigation plan. The person or agency undertaking the action shall apply for review, and the critical area report and mitigation plan shall be reviewed by the planning director in accordance with the review procedures contained herein. Restoration and/or mitigation activities must be initiated within one year of the date of the emergency, and completed in a timely manner;

(b) Operation, Maintenance or Repair. Operation, maintenance or repair of existing structures,

infrastructure improvements, utilities, public or private roads, dikes, levees or drainage systems that do not require a development permit, if the activity does not further alter or increase the impact to, or encroach further within, the critical area or buffer and there is no increased risk to life or property as a result of the proposed operation, maintenance, or repair;

(c) Passive Outdoor Activities. Recreation, education, and scientific research activities that do not degrade the critical area, including fishing, hiking, and bird watching;

(d) Permit Requests Subsequent to Previous Critical Area Review. Development permits that involve both discretionary land use approvals (such as subdivisions, rezones, or conditional use permits), and construction approvals (such as building permits) if all of the following conditions have been met:

(i) the provisions of this Chapter have been previously addressed as part of another approval;

(ii) there have been no material changes in the potential impact to the critical area or buffer since the prior review;

(iii) there is no new information available that is applicable to any critical area review of the site or particular critical area;

(iv) the permit or approval has not expired or, if no expiration date, no more than five years has elapsed since the issuance of that permit or approval; and

(v) compliance with any standards or conditions placed upon the prior permit or approval has been achieved or secured;

(e) Modification to Existing Structures. Structural modification of, addition to, or replacement of an existing legally constructed structure that does not further alter or increase the impact to the critical area or buffer and there is no increased risk to life or property as a result of the proposed modification or replacement, provided that restoration of structures substantially damaged by fire, flood, or

act of nature must be initiated within one year of the date of such damage, as evidenced by the issuance of a valid building permit, and diligently pursued to completion;

(f) Activities Within the Improved Right-of-Way. Replacement, modification, installation, or construction of utility facilities, lines, pipes, mains, equipment, or appurtenances, not including substations, when such facilities are located within the improved portion of the public right-of-way or a city authorized private roadway, except those activities that alter a wetland or watercourse (such as culverts or bridges) or result in the transport of sediment or increased stormwater;

(g) Planting of Vegetation. Planting of vegetation within a critical area or its buffer, provided a landscaping plan for this activity has been approved by the city;

(h) Conservation Activities. Conservation, restoration, or preservation of soil, water, vegetation, fish, and other wildlife that does not entail changing the structure or functions of the existing critical area;

(i) Pedestrian/Bicycle Trails. Pedestrian/bicycle trails that are located in buffer areas but not within wetlands or habitat conservation areas, where the trail surface meets all other requirements including water quality standards set forth in the city's Design Standards;

(j) Select Vegetation Removal Activities. Select vegetation removal activities are allowed. Accepted vegetation removal activities include: a) removing and controlling invasive or noxious weeds; b) harvesting wild crops in a manner that is not injurious to natural reproduction of such crops and provided the harvesting does not require tilling of soil, planting of crops, or alteration of the critical area by changing existing topography, water conditions, or water sources; c) removing trees that are hazardous, posing a threat to public safety, or posing an imminent risk of damage to private property; or c) removing vegetation to control a fire or halt the spread of disease or damaging insects consistent with the State Forest Practices Act (Chapter 76.09 RCW).

Unless otherwise provided or as a necessary part of an approved alteration, removal of any vegetation or woody debris from a habitat conservation area or wetland shall be prohibited;

(k) Chemical Applications. The application of herbicides, pesticides, organic or mineral-derived fertilizers, or other hazardous substances, if necessary, provided that their use shall be conducted in accordance with applicable state and federal law;

(l) Minor Site Investigative Work. Work necessary for land use submittals, such as surveys, soil logs, percolation tests, and other related activities, where such activities do not require construction of new roads or significant amounts of excavation. In every case, impacts to the critical area shall be minimized and disturbed areas shall be immediately restored; and

(m) Boundary Markers. Installation or modification of boundary markers.

Section 13: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.120 Exception—Reasonable Use.

(1) If the application of this Chapter would deny all reasonable use of the subject property, the property owner may apply for an exception pursuant to this Section.

(2) An application for a reasonable use exception shall be made to the planning director and shall include a critical area report, including a mitigation plan, if necessary; and any other related project documents, such as permit applications to other agencies, special studies, and environmental documents prepared pursuant to the State Environmental Policy Act (Chapter 43.21C RCW). The planning director shall approve, approve with conditions, or deny the exception request based on review of the submitted information, a site inspection, and the proposal's ability to comply with the following reasonable use exception criteria:

(a) the application of this Chapter would deny all reasonable use of the property;

(b) no other reasonable use of the property has less impact on the critical area;

(c) any alteration is the minimum necessary to allow for reasonable use of the property;

(d) the inability of the applicant to derive reasonable use of the property is not the result of actions by the applicant after the effective date of this Chapter, or the city's 1992 Critical Areas Ordinance;

(e) the proposal meets the requirements set forth in this Chapter; and

(f) the use does not pose an unreasonable threat to the public health, safety, or welfare.

(3) The burden of proof shall be on the applicant to bring forth evidence in support of the application and to provide sufficient information on which any decision has to be made on the application.

Section 14: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.130 General Review Process for Activities Affecting Critical Areas. The city shall follow the process discussed below and as outlined in Figure 16.50.1.

(1) Initial Review. The planning director shall take the following actions during the initial review of a project application:

(a) verify the information submitted by the applicant for the applicable development permit;

(b) evaluate the project area and vicinity for critical areas;

(c) for wetlands or habitat conservation areas, require that their boundaries be verified by a qualified professional, and require that a map of such boundaries be submitted to the planning director as part of the application for the applicable development permit if the project:

(i) is within 200 feet of a wetland or habitat conservation area for which the boundaries have not been certified and depicted on the city critical area maps; and

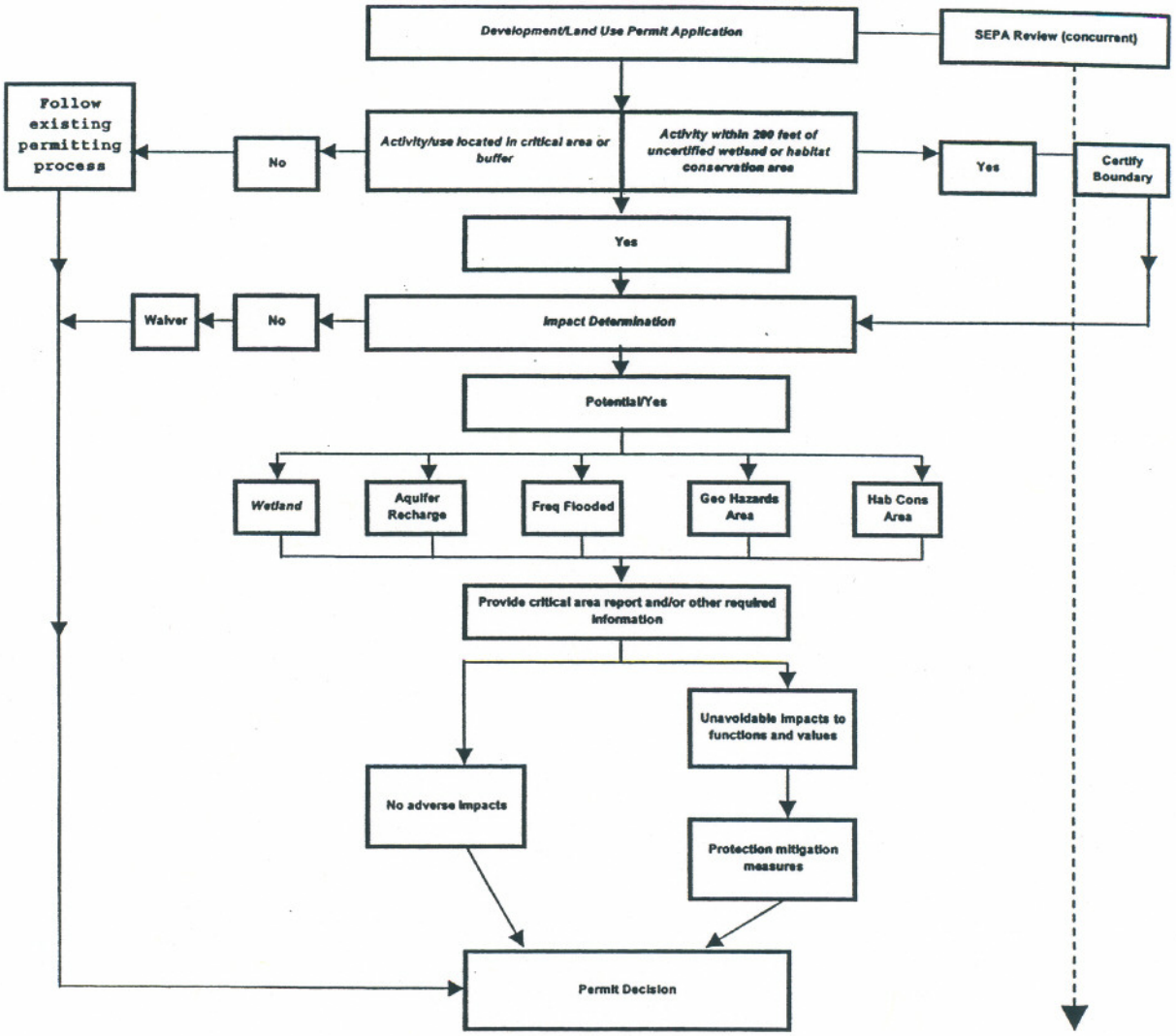
(ii) will not be receiving a determination of unlikely impact as provided in Subsection 16.50.130(2); and

(d) determine whether the proposed project is likely to impact the functions or values of critical areas.

Figure 16.50.1

City of Pullman

Critical Areas Process/Other Permits



NOTE: Appeal process follows route of associated permit. For appeals of administrative decisions regarding provisions of Chapter 16.50, use the administrative appeal process contained within the Zoning Code (Title 17) or Plats and Subdivisions Code (Title 13).

(2) Determination of Unlikely Impact. If the planning director determines that there are critical areas within or adjacent to the project area, but that the proposed activity is unlikely to degrade the functions or values of the critical area, the planning director may waive the requirement for a critical area report. A waiver may be granted if there is substantial evidence that all of the following criteria will be met:

(a) there will be no significant alteration of the critical area or buffer;

(b) the development proposal will not impact the critical area in a manner contrary to the purpose, intent, and requirements of this Chapter; and

(c) the proposal is consistent with other applicable regulations and standards.

The planning director shall prepare a written summary of the analysis and findings demanded within this Subsection prior to the city's decision on the applicable development permit. This summary may take the form of a letter to the applicant.

(3) Determination of Likely Impact. If the planning director determines that the proposed project is likely to impact a critical area, the planning director shall:

(a) notify the applicant that a critical area report must be submitted prior to further review of the project, and indicate each of the critical area types that should be addressed;

(b) require a critical area report from the applicant that has been prepared by a qualified professional;

(c) review and evaluate the critical area report to determine whether the development proposal conforms to the purposes and standards of this Chapter;

(d) assess potential impacts to the critical area and determine if they are necessary and unavoidable;

(e) determine if any mitigation proposed by the applicant is sufficient to protect the functions and values of the critical area and public health, safety, and welfare concerns consistent with the purpose, intent, and requirements of this Chapter; and

(f) prepare a written summary of the analysis and findings demanded within this Subsection prior to the city's decision on the applicable development permit. This summary may take the form of a letter to the applicant. Critical area review findings may result in: a) no adverse impacts to critical areas, b) a list of critical areas protection conditions for the applicable development permit, or c) denial of the applicable development permit based upon unavoidable impacts to critical areas functions and values.

Section 15: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.140 Wetland and Habitat Conservation Areas–Critical Area Report Requirements.

(1) Prepared by Qualified Professional. If the planning director determines, by means of the process described in Section 16.50.130, that a proposed project is likely to impact a wetland or habitat conservation area, the applicant shall submit a critical area report prepared by a qualified professional as defined herein.

(2) Incorporating Best Available Science. The critical area report shall use scientifically valid methods and studies in the analysis of data and field reconnaissance and reference the source of science used. The critical area report shall evaluate the proposal and all probable impacts to critical areas in accordance with the provisions of this Chapter.

(3) Minimum Critical Area Report Contents. At a minimum, the critical area report shall contain the following:

(a) the name and contact information of the applicant, a description of the proposal, and identification of the development permit(s) requested;

(b) a copy of the site plan for the development proposal showing:

(i) identified critical areas, buffers, and the development proposal with dimensions;

(ii) limits of any areas to be cleared; and

(iii) a proposed stormwater management plan for the development consistent with the current edition of the city's Design Standards;

(c) the names and professional qualifications of the persons preparing the critical area report and documentation of any fieldwork performed on the site;

(d) identification and characterization of all critical areas, wetlands, water bodies, and buffers adjacent to the proposed project area;

(e) a statement specifying the accuracy of the report, and all assumptions made and relied upon;

(f) an assessment of the probable cumulative impacts to critical areas resulting from development of the site and the proposed development;

(g) a description of reasonable efforts made to apply mitigation sequencing pursuant to Section 16.50.170 to

avoid, minimize, or mitigate impacts to critical areas;

(h) plans for adequate mitigation, as needed, to offset any impacts, in accordance with Sections 16.50.160 through 16.50.190;

(i) a discussion of the standards applicable to the critical area and proposed activity; and

(j) financial guarantees to ensure compliance, if applicable.

(4) Additional Information. Additional information is required for critical area reports related to wetlands and habitat conservation areas pursuant to applicable wetlands standards (Section 16.50.260) and habitat conservation area standards (Section 16.50.450).

Section 16: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.150 Wetland and Habitat Conservation Areas—Critical Area Report Modifications.

(1) Limitations to Study Area. The planning director may limit the required geographic area of the critical area report as appropriate if:

(a) the applicant, with assistance from the city, cannot obtain permission to access properties adjacent to the project area; or

(b) the proposed activity will affect only a limited part of the subject site.

(2) Modifications to Required Contents. The applicant may consult with the planning director prior to or during preparation of the critical area report to obtain concurrence on modifications to the required contents of the critical area report where, in the judgment of a qualified professional, more or less information is required to adequately address the potential critical area impacts and required mitigation.

(3) Reports Previously Prepared. A critical area report may be supplemented by or composed, in whole or in part, of any reports or studies required by other laws and regulations or previously prepared for and applicable to the development proposal site, as approved by the planning director.

Section 17: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.160 Mitigation Requirements.

(1) The applicant shall avoid all impacts that degrade the functions and values of a critical area or areas. Unless otherwise provided in this Chapter, if alteration to the critical area is unavoidable, all adverse impacts to or from critical areas and buffers resulting from a development proposal or alteration shall be mitigated in accordance with the critical area report and SEPA documents.

(2) Mitigation shall be in-kind and on-site, when possible, and sufficient to maintain the functions and values of the critical area, and to prevent risk from a hazard posed by a critical area.

(3) Except as otherwise allowed by this Chapter, mitigation shall not be implemented until: a) the planning director has approved a critical area report that includes a mitigation plan, and b) the city has approved the applicable development permit.

Section 18: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.170 Mitigation Sequencing. Applicants shall demonstrate that all reasonable efforts have been examined with the intent to avoid and minimize impacts to critical areas. When an alteration to a critical area is proposed, such alteration shall be avoided, minimized, or compensated for in the following order of preference:

(1) avoiding the impact altogether by not taking a certain action or parts of an action;

(2) minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps, such as project redesign, relocation, or timing, to avoid or reduce impacts;

(3) rectifying the impact to wetlands, critical aquifer recharge areas, frequently flooded areas, and habitat conservation areas by repairing, rehabilitating, or restoring the affected environment to the historical conditions or the conditions existing at the time of the initiation of the project;

(4) minimizing or eliminating the hazard by restoring or stabilizing the hazard area through engineered or other methods;

(5) reducing or eliminating the impact or hazard over time by preservation and maintenance operations during the life of the action;

(6) compensating for the impact to wetlands, critical aquifer recharge areas, frequently flooded areas, and habitat conservation areas by replacing, enhancing, or providing substitute resources or environments; and

(7) monitoring the hazard or other required mitigation and taking remedial action when necessary.

Mitigation for individual actions may include a combination of the above measures.

Section 19: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.180 Mitigation Plan Requirements. When mitigation is required, the applicant shall submit to the planning director a mitigation plan as part of the critical area report. The mitigation plan shall include:

(1) Environmental Goals and Objectives. The mitigation plan shall include a written narrative identifying environmental goals and objectives of the compensation proposed and including:

(a) a description of the anticipated impacts to the critical areas and the mitigating actions proposed and the purposes of the compensation measures, including the site selection criteria, identification of compensation goals, identification of resource functions, and dates for beginning and completion of site compensation construction activities; the goals and objectives shall be related to the functions and values of the impacted critical area;

(b) a review of the best available science supporting the proposed mitigation and a description of the critical area report author's experience to date in restoring or creating the type of critical area proposed; and

(c) an analysis of the likelihood of success of the compensation project.

(2) Performance Standards. The mitigation plan shall establish performance standards to meet the environmental goals and objectives required in this Section.

(3) Detailed Construction Plans. The mitigation plan shall include written specifications and descriptions of the mitigation proposed, such as:

(a) the proposed construction sequence, timing, and duration;

(b) grading and excavation details;

(c) erosion and sediment control features;

(d) a vegetation planting plan specifying plant species, quantities, locations, size, spacing, and density; and

(e) measures to protect and maintain plants until established.

These written specifications shall be accompanied by detailed site diagrams, scaled cross-sectional drawings, topographic maps showing slope percentage and final grade elevations, and/or other drawings appropriate to show construction techniques or anticipated final outcomes.

(4) Monitoring Program. The mitigation plan shall include a program for monitoring construction of the compensation project, and for assessing a completed project. The plan shall provide for the preparation of a compliance report by a qualified professional indicating that the mitigation measures proposed in the mitigation plan have been effected. A protocol shall also be included outlining the schedule for site monitoring in years 1, 3, and 5 after site construction, and how the monitoring data will be evaluated to determine if the performance standards are being met. A monitoring report shall be submitted as needed to document milestones, successes, problems, and contingency actions of the compensation project.

(5) Contingency Plan. The mitigation plan shall include identification of potential courses of action, and any corrective measures to be taken if monitoring or evaluation indicates project performance standards are not being met.

(6) Financial Guarantees. The mitigation plan shall include financial guarantees, if necessary, to ensure that the mitigation plan is fully implemented. Financial guarantees ensuring fulfillment of the compensation project, monitoring program, and any contingency measures shall be posted in accordance with Section 16.50.230.

Section 20: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.190 Innovative Mitigation.

(1) The planning director may encourage and facilitate innovative mitigation projects. Advance mitigation or mitigation banking are examples of alternative mitigation

projects allowed under the provisions of this Section where one or more applicants, or an organization with demonstrated capability, may undertake a mitigation project together if it is demonstrated that all of the following circumstances exist:

(a) creation or enhancement of a larger system of critical areas and open space is preferable to the preservation of many individual habitat areas;

(b) the group demonstrates the organizational and fiscal capability to act cooperatively;

(c) the group demonstrates that long-term management of the habitat area will be provided; and

(d) there is a clear potential for success of the proposed mitigation at the identified mitigation site.

(2) Conducting mitigation as part of a cooperative process does not reduce or eliminate the required replacement ratios.

(3) Innovative mitigation projects as described in this Section may, at the discretion of the planning director, be exempted from the timing requirements set forth in Subsection 16.50.160(3).

Section 21: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.200 Critical Area Markers and Signs. The critical area or buffer shall be identified with temporary signs prior to any site alteration. Such temporary signs may be replaced with permanent signs, as determined appropriate by the planning director. The planning director may also require that fencing be installed or native vegetation be planted or retained at a site to delineate and protect critical areas and/or their buffers.

Section 22: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.210 Building Setbacks. Unless otherwise provided by means of an approved critical area report or the provisions of this Chapter, buildings and other structures shall be set back a minimum of 15 feet from the edges of all critical area buffers or from the edges of all critical areas, if no buffers are required. The following may be allowed in the building setback area:

(1) landscaping;

(2) uncovered decks;

(3) building overhangs if such overhangs do not extend more than two feet into the setback area; and

(4) impervious ground surfaces, such as driveways, parking areas, and patios, provided that such improvements are constructed in accordance with the city's Design Standards.

Section 23: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.220 Unauthorized Critical Area Alterations and Enforcement.

(1) Unauthorized Alteration. When a critical area or its buffer has been altered in violation of this Chapter, the city shall have the authority to issue a stop work order to cease all ongoing development work, and order restoration, rehabilitation, replacement, or, where determined appropriate by the planning director, mitigation measures at the owner's or other responsible party's expense to compensate for violation of provisions of this Chapter and other applicable Pullman City Code provisions governing the applicable development permit.

(2) Restoration/Mitigation Plan Required. All development work shall remain stopped until a restoration/mitigation plan is prepared and approved by the planning director. Such a plan shall be prepared by a qualified professional and shall describe how the actions proposed meet the minimum standards described in Subsection 16.50.220(3) and/or mitigation requirements outlined in Sections 16.50.160 through 16.50.190, if mitigation is determined to be appropriate by the planning director. The planning director shall, at the violator's expense, seek expert advice in determining the adequacy of the plan. Inadequate plans shall be returned to the applicant or violator for revision and resubmittal.

(3) Minimum Standards for Restoration or Mitigation.

(a) For alterations to critical aquifer recharge areas, frequently flooded areas, wetlands, and habitat conservation areas, the following minimum standards shall be met for the restoration or mitigation of impacts to a critical area, provided that if the violator can demonstrate in a restoration/mitigation plan that greater functional and habitat values can be obtained, these standards may be modified by the planning director:

(i) the historic structural and functional values shall be restored, including water quality and habitat functions;

(ii) the historic soil types and configuration shall be replicated;

(iii) the critical area and buffers shall be replanted with native vegetation that replicates the vegetation historically found on the site in species types, sizes, and densities; and

(iv) the historic functions and values should be replicated at the location of the alteration.

(b) For alterations to flood and geological hazards, the following minimum standards shall be met for the restoration of a critical area, provided that, if the violator can demonstrate that greater safety can be obtained, these standards may be modified:

(i) the hazard shall be reduced to a level equal to, or less than, the pre-development hazard;

(ii) any risk of personal injury resulting from the alteration shall be eliminated or minimized; and

(iii) the hazard area and buffers shall be replanted with native vegetation sufficient to minimize the hazard.

(4) Penalties. Any violation or failure to comply with any of the provisions of this Chapter, or any amendment thereto, shall be a civil infraction and shall be subject to a fine in an amount not to exceed $500.00 for each violation. Each day in which a violation continues shall be deemed a separate offense. Any activity carried out contrary to the provisions of this Chapter shall constitute a public nuisance and may be enjoined as provided by the statutes of the state of Washington. Daily fines shall not be levied until after a violator has received a written notice of the violation and shall not be levied while a written notice of violation is under appeal through the applicable appeal process.

Section 24: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.230 Financial Guarantees to Ensure Mitigation and Maintenance.

(1) Mitigation required pursuant to a development proposal should be completed prior to final project approval. When the planning director determines it is not feasible for required mitigation to be completed prior to final project approval, the planning director shall require the applicant to post a financial guarantee in a form and amount deemed acceptable by the planning director. Acceptable financial guarantees include, but are not limited to, cash, bond, promissory note, or letter of credit.

(2) Once mitigation measures have been completed, the planning director may require a financial guarantee for maintenance of said mitigation measures.

(3) The financial guarantee shall be in the amount of 125 percent of the estimated cost of the improvements or the estimated cost of restoring the functions and values of the critical area that are at risk, whichever is greater.

(4) The financial guarantee shall remain in effect until the planning director determines, in writing, that the standards bonded for have been met. Financial guarantees for maintenance shall be held by the city for a minimum of five years to ensure that the required mitigation has been fully implemented and demonstrated to function, and may be held for longer periods when necessary.

(5) Depletion, failure, or collection of financial guarantee funds shall not discharge the obligation of an applicant or violator to complete required mitigation, maintenance, monitoring, or restoration.

(6) Public development proposals shall be relieved from having to comply with the requirements of this Section if public funds have previously been committed for mitigation, maintenance, monitoring, or restoration.

(7) Any failure to satisfy critical area requirements established by law or condition including, but not limited to, the failure to provide a monitoring report within 30 days after it is due or the failure to comply with other provisions of a mitigation plan may be deemed by the planning director to constitute a default, and the planning director may demand payment of any financial guarantees or require other action authorized by the Pullman City Code or any other law.

(8) Any funds recovered pursuant to this Section shall be used to complete the required mitigation.

Section 25: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.240 Critical Area Inspections. Reasonable access to the site shall be provided to the city, state, and federal agency review staff for the purposes of inspections during any proposal review, restoration, emergency action, or monitoring period. Additionally, the city or its agent shall have reasonable access to the site for completing necessary remediation work in the event of noncompliance. Failure to provide access shall be deemed a violation and shall be subject to the penalties set forth in Subsection 16.50.220(4).

Section 26: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.250 Designation, Rating, and Mapping Wetlands.

(1) Designating Wetlands. Wetlands are those areas, designated in accordance with the *Washington State Wetland Identification and Delineation Manual*, that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation adapted for life in saturated soil conditions. All areas within the city meeting the wetland designation criteria in the *Identification and Delineation Manual*, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this Chapter.

(2) Wetland Ratings. Wetlands shall be rated according to the Department of Ecology wetland rating system found in the Washington State Wetland Rating for Eastern Washington (*Department of Ecology Publication #91-58*), as amended. This document contains definitions and methods for determining if the general criteria below are met.

(a) Wetland Rating Categories.

(i) Category I. Category I wetlands are those that meet the following criteria:

(aa) documented habitat for federal or state listed endangered or threatened fish, animal, or plant species;

(bb) high quality native wetland communities, including documented category I or II quality Natural

Heritage wetland sites and sites which qualify as a category I or II quality Natural Heritage wetland (defined in the rating system documents);

(cc) high quality, regionally rare wetland communities with irreplaceable ecological functions, including sphagnum bogs and fens, wetlands, or mature forested swamps (defined in the rating system documents); or

(dd) wetlands of exceptional local significance.

(ii) Category II. Category II wetlands are those not defined as Category I wetlands that meet the following criteria:

(aa) documented habitats for state listed sensitive plant, fish or animal species;

(bb) wetlands that contain plant, fish or animal species listed as priority species by the Department of Fish and Wildlife;

(cc) wetland types with significant functions that may not be adequately replicated through creation or restoration;

(dd) wetlands possessing significant habitat value based on a score of 22 or more points in the habitat rating system; or

(ee) documented wetlands of local significance.

(iii) Category III. Category III wetlands are those that do not satisfy category I, II or IV criteria, and with a habitat value rating of 21 points or less.

(iv) Category IV. Category IV wetlands are those that meet the following criteria:

(aa) hydrologically isolated wetlands that are less than or equal to one acre in size, have only one wetland class, and are dominated (greater than 80 percent areal cover) by a single non-native

plant species (monotypic vegetation); or

(bb) hydrologically isolated wetlands that are less than or equal to two acres in size, have only one wetland class, and have greater than 90 percent areal cover of non-native plant species.

(b) Wetland Ratings for Selected Areas. Wetland rating categories have been tentatively assigned to the following areas within the city:

Wetland	Category
Missouri Flat Creek	II
Paradise Creek	II
South Fork Palouse River	II
Sunshine Creek	II
Dry Fork Creek	III
Hall Drive Wetland	III
Terre View Drive Wetland	II
Airport Road Creek	II

(c) Date of Wetland Rating. Wetland rating categories shall be applied as the wetland exists on the date of adoption of the rating system by the local government, as the wetland naturally changes thereafter, or as the wetland changes in accordance with permitted activities. Wetland rating categories shall not change due to illegal modifications.

(3) Mapping. The approximate location and extent of known wetlands are shown on the pertinent city critical area map. National Wetland Inventory Maps and the city critical area map regarding wetlands are to be used as a guide for the city, project applicants, and property owners, and will be periodically updated as new information becomes available. These maps are a reference and do not provide a final critical area designation. The exact location of a wetland's boundary shall be determined through the performance of a field investigation by a qualified professional applying the *Washington State Wetlands Identification and Delineation Manual* as required by RCW 36.70A.175 (*Department of Ecology Publication #96-94*). Wetland boundaries shall be clearly demarcated with non-

degradable survey flagging labeled "WETLAND BOUNDARY" or "WETLAND DELINEATION." Flagging shall be attached to existing vegetation or stakes at a maximum interval of 50 linear feet. Individual flags should be labeled with a wetland identifier and consecutive numbers (e.g., A-1 through A-8).

Section 27: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.260 Wetlands Critical Area Report—Additional Requirements.

(1) Areas Addressed in Report. The following areas shall be addressed in a critical area report for wetlands:

(a) the project area of the proposed activity;

(b) all wetlands and recommended buffers within 200 feet of the project area; and

(c) all shoreline areas, water features, flood plains, and other critical areas, and related buffers within 200 feet of the project area.

(2) Wetland Analysis. In addition to the minimum required contents of reports in Sections 16.50.140 and 16.50.150, a critical area report for wetlands shall contain an analysis of the wetlands including the following site- and proposal-related information at a minimum:

(a) a written assessment and accompanying maps of the wetlands and buffers within 200 feet of the project area, including the following information at a minimum:

(i) wetland delineation and required buffers;

(ii) existing wetland acreage;

(iii) wetland category; vegetative, faunal, and hydrologic characteristics; and

(iv) soil and substrate conditions;

(b) a discussion of measures, including avoidance, minimization and mitigation, proposed to preserve existing wetlands and restore any wetlands that were degraded prior to the current proposed land use activity.

(c) proposed mitigation, if needed, including a written assessment and accompanying maps of the mitigation area, including the following information at a minimum:

(i) existing wetland acreage and proposed impact area;

(ii) vegetative, faunal, and hydrologic conditions;

(iii) relationship within watershed and to existing water bodies;

(iv) soil and substrate conditions, topographic elevations;

(v) existing and proposed adjacent site conditions;

(vi) proposed wetland buffers; and

(vii) property ownership; and

(d) a discussion of ongoing management practices that will protect wetlands after the project site has been developed, including proposed monitoring and maintenance programs.

(3) Additional Information. When appropriate, the planning director may also require the critical area report to include an evaluation by the Department of Ecology or an independent qualified expert regarding the applicant's analysis and the effectiveness of any proposed mitigating measures or programs, and to include any recommendations as appropriate.

Section 28: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.270 General Requirements Pertaining to Wetlands.

(1) Activities in Wetland Areas. A proposed activity may only be permitted in a wetland or wetland buffer if the applicant can show that the activity, including associated mitigation measures, will not degrade the functions and values of the wetland and other critical areas.

(2) Wetland Buffers. Unless otherwise provided for in this Chapter, wetland buffers are required.

(a) Standard Buffer Widths. The standard buffer widths presume the existence of a relatively intact native vegetation community in the buffer zone adequate to protect the wetland functions and values at the time of the proposed activity. If the vegetation is inadequate then the buffer width shall be increased or the buffer should be planted to maintain the standard width. Required standard wetland buffers, based on wetland category and land use intensity, are as follows:

(i) Category I

High intensity land use	200 feet

	Low intensity land use	150 feet
(ii)	Category II	
	High intensity land use	150 feet
	Low intensity land use	100 feet
(iii)	Category III	
	High intensity land use	100 feet
	Low intensity land use	50 feet
(iv)	Category IV	
	High intensity land use	50 feet
	Low intensity land use	25 feet

(b) Measurement of Wetland Buffers. All buffers shall be measured from the wetland boundary as surveyed in the field. The width of the wetland buffer shall be determined according to the wetland category and the proposed land use. The buffer for a wetland created, restored, or enhanced as compensation for wetland alterations shall be the same as the buffer required for the category of the created, restored, or enhanced wetland.

(c) Increased Wetland Buffer Width. The planning director may require increased buffer width in accordance with the critical area report and the best available science on a case-by-case basis when a larger buffer is necessary to protect wetland functions and values based on site-specific characteristics. This determination shall be based on one or more of the following criteria:

(i) a larger buffer is needed to protect other critical areas;

(ii) the buffer or adjacent uplands has an overall slope steeper than 15 percent or is susceptible to erosion and standard erosion control measures will not prevent adverse impacts to the wetland; or

(iii) the buffer area has minimal vegetative cover, although implementation of a buffer planting plan may substitute for increasing the buffer width.

In no case shall wetland buffers be increased to a width two times that of the standard required buffer.

(d) Reduced Wetland Buffer Width. The planning director may allow the standard wetland buffer width to be reduced in accordance with the critical area report

and the best available science on a case-by-case basis when it is determined that a smaller area is adequate to protect the wetland functions and values based on site-specific characteristics. This determination shall be supported by documentation showing that a reduced buffer is adequate based on all of the following criteria:

(i) requiring the standard buffer poses an extraordinary hardship on the landowner;

(ii) the existing buffer area is well-vegetated with native species and has an overall slope of less than ten percent; and

(iii) no direct or indirect, short-term or long-term, adverse impacts to wetlands will result from the proposed activity.

In no case shall the standard buffer width be reduced by more than 50 percent, or the buffer width be less than 25 feet unless the applicant demonstrates an acceptable reasonable use as described in 16.50.120.

(e) Wetland Buffer Width Averaging. The planning director may allow modification of the standard wetland buffer width in accordance with the critical area report and the best available science on a case-by-case basis by averaging buffer widths. Averaging of buffer widths may only be allowed where a qualified wetlands professional demonstrates that:

(i) it will not reduce wetland functions or values;

(ii) the wetland contains variations in sensitivity due to existing physical characteristics or the character of the buffer varies in slope, soils, or vegetation, and the wetland would benefit from a wider buffer in places and would not be adversely impacted by a narrower buffer in other places;

(iii) the total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer; and

(iv) the buffer width is not reduced to less than 50 percent of the standard width or 25 feet,

whichever is greater, unless the applicant demonstrates an acceptable reasonable use as described in 16.50.120.

(f) Buffers for Mitigation Shall be Consistent. All mitigation sites shall have buffers consistent with the buffer requirements of this Chapter.

(g) Buffer Conditions Shall be Maintained. Except as otherwise specified or allowed in accordance with this Chapter, wetland buffers shall be retained in their natural condition.

(h) Functionally Isolated Buffer Areas. Areas that are functionally separated from a wetland and do not provide protection to the wetland from potential adverse impacts due to preexisting roads, facilities, or vertical separation, shall be excluded from buffers otherwise required by this chapter.

(3) Stormwater Management Facilities. Stormwater management facilities are not allowed in buffers of Category I wetlands. Stormwater management facilities may be allowed within the buffer of Category II, III, or IV wetlands, provided that:

(a) no other location is feasible, and

(b) the location of such facilities will not degrade the functions or values of the wetland.

(4) Subdivisions. The subdivision and short subdivision of land in wetlands and associated buffers is subject to the following:

(a) Land that is located wholly within a wetland or its buffer may not be subdivided.

(b) Land that is located partially within a wetland or its buffer may be divided provided that an accessible and contiguous portion of each new lot:

(i) is located outside of the wetland and its buffer; and

(ii) meets the minimum lot size requirements of the city zoning code (Title 17).

(c) Access roads and utilities serving a proposed subdivision or other property may be permitted within the wetland and associated buffers only if the planning director determines that no other feasible alternative exists and these facilities are otherwise

established consistent with the provisions of this Chapter.

(5) Signs and Fencing of Wetlands.

(a) Temporary Markers. The outer perimeter of the wetland or buffer and the limits of those areas to be disturbed pursuant to an approved development permit shall be marked in the field in such a way as to ensure that no unauthorized intrusion will occur prior to the commencement of permitted activities. This temporary marking shall be maintained throughout construction, and shall not be removed until permanent signs, if required, are in place.

(b) Permanent Signs. As a condition of any development permit, the planning director may require the applicant to install permanent signs along the boundary of a wetland and/or buffer. If required, permanent signs shall be made of a metal face and attached to a metal post, or another material of equal durability. Signs must be posted at an interval of one per lot or every 50 linear feet, whichever yields the greater amount of signs, and must be maintained by the property owner in perpetuity. The sign shall be worded as follows or with alternative language approved by the director:

"Protected Wetland Area
Do Not Disturb
Contact City of Pullman
Regarding Uses and Restrictions"

(c) Fencing.

(i) As a condition of any development permit, the planning director may require the applicant to install a permanent fence at the edge of the wetland buffer, when fencing will prevent future impacts to the wetland.

(ii) The applicant shall be required to install a permanent fence around the wetland or buffer when domestic grazing animals are present or may be introduced on site.

(iii) Fencing installed as part of a proposed activity or as required in this Paragraph shall be designed so as to not interfere with species migration, including fish runs,

and shall be constructed in a manner that minimizes impacts to the wetland and associated habitat.

(iv) At no time shall treated wood posts (e.g., creosote) be allowed in wetland areas or in adjacent uplands to prevent chemicals from migrating into the wetland.

Section 29: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.280 Mitigation Requirements Pertaining to Wetlands.

(1) Mitigation Shall Achieve Equivalent or Greater Biological Functions. Mitigation for proposed or unauthorized alterations to wetlands and/or buffer areas shall achieve equivalent or greater biologic functions and shall be consistent with the Department of Ecology *Guidelines for Developing Freshwater Wetlands Mitigation Plans and Proposals*, 1994, as revised.

(2) Mitigation Shall Result in No Net Loss. Wetland mitigation actions shall not result in a net loss of wetland area except when the following criteria are met:

(a) the lost wetland area provides minimal functions and the mitigation action(s) results in a net gain in wetland functions as determined by a site-specific function assessment using Department of Ecology *Methods for Assessing Wetland Functions Vol. 2 - Depressional Wetlands in the Columbia Basin of Eastern Washington, Part 1 & 2*, December 2000, as amended; or

(b) the lost wetland area provides minimal functions as determined by a site-specific function assessment and other protected or enhanced habitats provide greater benefits to the functioning of the watershed, such as riparian habitat protection and enhancement.

(3) Mitigation for Lost Functions and Values. Mitigation actions shall address functions affected by the alteration to achieve functional equivalency or improvement, and shall provide similar wetland functions as those lost except when:

(a) the lost wetland provides minimal functions as determined by a site-specific function assessment and the proposed mitigation action(s) will provide equal or greater functions or will provide functions shown

to be limiting within a watershed through a formal watershed assessment protocol; or

(b) out-of-kind replacement will best meet formally identified regional goals, such as replacement of historically diminished wetland types.

(4) Preference of Mitigation Actions. Mitigation actions that require compensation by replacing, enhancing, or substitution, shall occur in the following order of preference:

(a) restoring wetlands on upland sites that were formerly wetlands;

(b) creating wetlands on disturbed upland sites such as those with vegetative cover consisting primarily of exotic introduced species;

(c) enhancing significantly degraded wetlands;

(d) preserving high-quality wetlands that are under imminent threat.

(5) Location of Mitigation.

(a) Mitigation actions shall be conducted on the same site as the alteration except when the following apply:

(i) there are no reasonable on-site opportunities or on-site opportunities do not have a high likelihood of success due to development pressures, adjacent land uses, or on-site buffers or connectivity are inadequate;

(ii) off-site mitigation has a greater likelihood of providing equal or improved wetland functions than the impacted wetland.

(b) If the planning director authorizes off-site mitigation, the location of this mitigation shall be in the same drainage basin and the same Water Resource Inventory Area (WRIA) as the site of the alteration unless:

(i) established regional or watershed goals for water quality, flood or conveyance, habitat, or other wetland functions have been established and strongly justify location of mitigation at another site; or

(ii) credits from a state certified wetland mitigation bank are used as mitigation and

the use of these credits justifies location of mitigation at another site.

(c) Off-site locations for mitigation should be within the city limits if feasible opportunities for appropriate mitigation are available.

(6) Mitigation Ratios.

(a) Acreage Replacement Ratios. The following ratios shall apply to creation or restoration that is in-kind, on-site, the same category, timed prior to or concurrent with alteration, and has a high probability of success. These ratios do not apply to remedial actions resulting from unauthorized alterations; greater ratios shall apply in those cases. These ratios do not apply to the use of credits from a state certified wetland mitigation bank. When credits from a certified bank are used, replacement ratios should be consistent with the requirements of the bank's certification. The first number specifies the acreage of replacement wetlands and the second specifies the acreage of wetlands altered.

Category I	6-to-1
Category II	3-to-1
Category III	2-to-1
Category IV	1.5-to-1

(b) Increased Replacement Ratio. The planning director may increase the ratios under the following circumstances:

(i) uncertainty exists as to the probable success of the proposed restoration or creation;

(ii) a significant period of time will elapse between impact and replication of wetland functions;

(iii) proposed mitigation will result in a lower category wetland or reduced functions relative to the wetland being impacted; or

(iv) the impact was an unauthorized impact.

(c) Decreased Replacement Ratio. The planning director may decrease these ratios under the following circumstances:

(i) documentation by a qualified wetlands specialist demonstrates that the proposed

mitigation actions have a very high likelihood of success;

(ii) documentation by a qualified wetlands specialist demonstrates that the proposed mitigation actions will provide functions and values that are significantly greater than the wetland being impacted; or

(iii) the proposed mitigation actions are conducted in advance of the impact and have been shown to be successful.

(d) Minimum Replacement Ratio. In all cases, a minimum acreage replacement ratio of 1-to-1 shall be required.

(7) Wetland Mitigation Banks.

(a) Credits from a wetland mitigation bank may be approved for use as compensation for unavoidable impacts to wetlands when:

(i) the bank is certified through applicable provisions administered by the Department of Ecology and the Army Corps of Engineers;

(ii) the planning director determines that the wetland mitigation bank provides appropriate compensation for the authorized impacts; and

(iii) the proposed use of credits is consistent with the terms and conditions of the bank's certification.

(b) Replacement ratios for projects using bank credits shall be consistent with replacement ratios specified in the bank's certification.

(c) Credits from a certified wetland mitigation bank may be used to compensate for impacts located within the service area specified in the bank's certification. In some cases, bank service areas may include portions of more than one WRIA for specific wetland functions.

(8) Wetlands Enhancement as Mitigation.

(a) Impacts to wetlands may be mitigated by enhancement of existing significantly degraded wetlands. Applicants proposing to enhance wetlands must produce a critical area report that identifies how enhancement will increase the functions of the degraded wetland and how this increase will adequately mitigate for the loss of wetland area and function at the impact site. An enhancement proposal must also show whether existing

wetland functions will be reduced by the enhancement actions.

(b) At a minimum, enhancement acreage shall be double the acreage required for creation or restoration under Subsection 16.50.280(6). The ratios shall be greater than double the required acreage where the enhancement proposal would result in minimal gain in the performance of wetland functions and/or result in the reduction of other wetland functions currently being provided in the wetland.

(9) Wetland Preservation as Mitigation. Impacts to wetlands may be mitigated by preservation of wetland areas when used in combination with other forms of mitigation such as creation, restoration, or enhancement at the preservation site or at a separate location. Preservation may also be used by itself, but more restrictions, as outlined below, will apply.

(a) Preservation in Combination with Other Forms of Compensation. Preservation as mitigation is acceptable when done in combination with restoration, creation, or enhancement providing that a minimum of 1-to-1 acreage replacement is provided by restoration or creation and the following criteria are met:

(i) the impact area is small, and/or impacts are to a Category III or IV wetland;

(ii) preservation of a high quality system occurs in the same WRIA or drainage basin as the wetland impact; and

(iii) preservation sites include buffer areas adequate to protect the habitat and its functions from encroachment and degradation.

(b) Preservation as the Sole Means of Mitigation for Wetland Impacts. Preservation of at-risk, high-quality habitat may be considered as the sole means of mitigation for wetland impacts when all of the following criteria are met:

(i) preservation is used as a form of mitigation only after the standard sequencing of mitigation (avoid, minimize, and then compensate) has been applied;

(ii) creation, restoration, and enhancement opportunities have also been considered, and preservation is the best mitigation option;

(iii) the impact area is small and/or impacts are to a Category III or IV wetland;

(iv) preservation of a high quality system occurs in the same WRIA or drainage basin where the wetland impact occurs;

(v) preservation sites include buffer areas adequate to protect the habitat and its functions from encroachment and degradation;

(vi) the preservation site is determined to be under imminent threat—specifically, sites with the potential to experience a high rate of undesirable ecological change due to on- or off-site activities ("potential" includes permitted, planned, or perceived actions); and

(vii) the area proposed for preservation is of high quality and critical for the health of the watershed or basin, with the following characteristics serving as indicators of high quality sites:

(aa) Category I or II wetland rating;

(bb) rare wetland type (for example, bogs, estuaries);

(cc) habitat for threatened or endangered species;

(dd) provides biological and/or hydrological connectivity;

(ee) high regional or watershed importance (for example, listed as priority site in watershed plan); and

(ff) large size with high species diversity (plants and/or animals) and/or high abundance.

(c) Mitigation Ratios for Preservation as the Sole Means of Mitigation. Mitigation ratios for preservation as the sole means of mitigation shall range from 7-to-1 to 20-to-1, as determined by the planning director, depending on the quality of wetlands being mitigated and the quality of the wetlands being preserved.

Section 30: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.290 Development Standards–Wetland Categories.

(1) Category I Wetlands. Activities and uses shall be prohibited from Category I wetlands, except as provided for in the public agency and utility exception and reasonable use exception sections of this Chapter.

(2) Category II and III Wetlands. With respect to activities proposed in Category II and III wetlands, the following standards shall apply:

(a) Water-dependent activities may be allowed where there are no practicable alternatives that would not have a less adverse impact on the wetland and other critical areas.

(b) Where nonwater-dependent activities are proposed, it shall be presumed that alternative locations are available, and activities and uses shall be prohibited, unless the applicant demonstrates that:

(i) the basic project purpose cannot reasonably be accomplished and successfully avoid, or result in less adverse impact on, a regulated wetland on another site or sites in the general region; and

(ii) all alternative designs of the project as proposed, that would avoid, or result in less of an adverse impact on a regulated wetland or its buffer, such as a reduction in the size, scope, configuration, or density of the project, are not feasible.

(3) Category IV Wetlands. Activities and uses that result in unavoidable and necessary impacts may be permitted in Category IV wetlands and associated buffers in accordance with the critical area report and mitigation plan, and only if the proposed activity is the only reasonable alternative that will accomplish the applicant's objectives.

Section 31: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.300 Critical Aquifer Recharge Areas Designation. Critical aquifer recharge areas (CARA) are those areas with a critical recharging effect on aquifers used for potable water as defined by WAC 365-190-030(2). CARA have prevailing geologic conditions associated with infiltration rates that create a high

potential for contamination of ground water resources or contribute significantly to the replenishment of ground water. The following areas have been identified based on local conditions:

(1) Wellhead Protection Areas. Wellhead protection areas shall be defined by the boundaries of the ten (10) year time of ground water travel, or boundaries established using alternate criteria approved by the Department of Health in those settings where ground water time of travel is not a reasonable delineation criterion, in accordance with WAC 246-290-135.

(2) Special Protection Areas. Special protection areas are those areas defined by WAC 173-200-090. For the city, special protection areas shall include all areas for which perennial surface water (i.e. Paradise Creek, and portions of the South Fork Palouse River and Missouri Flat Creek)) are in direct or near contact with outcroppings of either the Wanapum or Grand Ronde basalts.

Section 32: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.310 Mapping of Critical Aquifer Recharge Areas. The approximate location and extent of critical aquifer recharge areas are shown on the pertinent city critical area map. This map is to be used as a guide for the city, project applicants, and property owners, and will be periodically updated as new information becomes available. This map is a reference and does not provide a final critical area designation.

Section 33: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.320 Existing Regulations Pertaining to Critical Aquifer Recharge Areas. The following provisions are in place to protect critical aquifer recharge areas and regulate activities that might potentially impact these areas:

(1) City of Pullman Design Standards

(2) City of Pullman Wellhead Protection Plan

(3) State and federal regulations applicable to specific uses including but not limited to those provided in Sections 16.50.340 and 16.50.350.

Section 34: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.330 General Requirements Pertaining to Critical Aquifer Recharge Areas.

(1) Activities may only be permitted in a critical aquifer recharge area if the applicant can demonstrate that the proposed activity will not adversely affect the recharging of the aquifer and that the proposed activity will not cause contaminants to enter the aquifer.

(2) The proposed activity must comply with the water source protection requirements and recommendations of the federal Environmental Protection Agency, state Department of Health, and the Whitman County Health Department, and as provided in the city's wellhead protection plan.

(3) The proposed activity must be designed and constructed in accordance with erosion control and surface/stormwater management requirements in the current edition of the city's Design Standards.

Section 35: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.340 Development Standards for Specific Activities in Critical Aquifer Recharge Areas.

(1) Storage Tanks. All storage tanks proposed to be located in a critical aquifer recharge area must comply with local building code requirements and must conform to the following requirements:

(a) Underground Tanks. All new underground storage facilities proposed for use in the storage of hazardous substances or hazardous wastes shall be designed and constructed so as to:

(i) prevent releases due to corrosion or structural failure for the operational life of the tank;

(ii) be protected against corrosion, constructed of noncorrosive material, steel clad with a noncorrosive material, or designed to include a secondary containment system to prevent the release or threatened release of any stored substances; and

(iii) use material in the construction or lining of the tank that is compatible with the substance to be stored.

(b) Aboveground Tanks. All new aboveground storage facilities proposed for use in the storage of hazardous substances or hazardous wastes shall be designed and constructed so as to:

(i) not allow the release of a hazardous substance to the ground, ground waters, or surface waters;

(ii) have a primary containment area enclosing or underlying the tank or part thereof; and

(iii) have a secondary containment system either built into the tank structure or a dike system built outside the tank for all tanks.

(2) Vehicle Repair and Servicing. Vehicle repair and servicing must be conducted over impermeable pads and within a covered structure capable of withstanding normally expected weather conditions. Chemicals used in the process of vehicle repair and servicing must be stored in a manner that protects them from weather and provides containment should leaks occur.

(3) Spreading or Injection of Reclaimed Water. Water reuse projects for reclaimed water must be in accordance with the adopted water or sewer comprehensive plans that have been approved by the Departments of Ecology and Health.

(a) Surface spreading must meet the ground water recharge criteria given in Chapter 90.46.080 RCW and Chapter 90.46.010(10).

(b) Direct injection must be in accordance with the standards developed by authority of Chapter 90.46.042 RCW.

(4) State and Federal Regulations. The uses listed below shall be conditioned as necessary to protect critical aquifer recharge areas in accordance with the applicable state and federal regulations.

Statutes, Regulations, and Guidance Pertaining to Ground Water Impacting Activities

Activity	Statute - Regulation - Guidance
Above Ground Storage Tanks	Chapter 173-303 -640 WAC
Animal Feedlots	Chapter 173-216 WAC, Chapter 173-220 WAC
Automobile Washers	Chapter 173-216 WAC, Best Management Practices for Vehicle and Equipment Discharges (WDOE WQ-R-95-56)
Below Ground Storage Tanks	Chapter 173-360 WAC
Chemical Treatment Storage and Disposal Facilities	Chapter 173-303-182 WAC
Hazardous Waste Generator (*Boat Repair Shops, Biological Research Facility, Dry Cleaners,*	Chapter 173-303 WAC

Activity	Statute - Regulation - Guidance
Furniture Stripping, Motor Vehicle Service Garages, Photographic Processing, Printing and Publishing Shops, etc.)	
Injection Wells	Federal 40 CFR Parts 144 and 146, Chapter 173-218 WAC
Junk Yards and Salvage Yards	Chapter 173-304 WAC, Best Management Practices to Prevent Stormwater Pollution at Vehicles Recycler Facilities (WDOE 94-146)
Oil and Gas Drilling	Chapter 332-12-450 WAC, WAC, Chapter 173-218 WAC
On-Site Sewage Systems (Large Scale)	Chapter 173-240 WAC
On-Site Sewage Systems (< 14,500 gal/day)	Chapter 246-272 WAC, Local Health Ordinances
Pesticide Storage and Use	Chapter 15.54 RCW, Chapter 17.21 RCW
Sawmills	Chapter 173-303 WAC, 173-304 WAC, Best Management Practices to Prevent Stormwater Pollution at Log Yards (WDOE 95-53)
Solid Waste Handling and Recycling Facilities	Chapter 173-304 WAC
Surface Mining	Chapter 332-18-015 WAC
Waste Water Application to Land Surface	Chapter 173-216 WAC, Chapter 173-200 WAC, WDOE Land Application Guidelines, Best Management Practices for Irrigated Agriculture

Section 36: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.350 Uses Prohibited in Critical Aquifer Recharge Areas. The following activities and uses are prohibited in critical aquifer recharge areas:

(1) Landfills. Landfills, including hazardous or dangerous waste, municipal solid waste, special waste, wood waste, and inert and demolition waste landfills;

(2) Underground Injection Wells. Class I, III, and IV wells and subclasses 5F01, 5D03, 5F04, 5W09, 5W10, 5W11, 5W31, 5X13, 5X14, 5X15, 5W20, 5X28, and 5N24 of Class V wells (Chapter 173-218 WAC);

Section 37: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.360 Classification of Frequently Flooded Areas. The flood areas in the city are classified as either one of two types:

(1) Floodway. Floodways are defined as the channel of a stream and adjacent land areas which are required to carry and discharge the flood water or flood flows of any river or stream associated with a regulatory flood.

(2) Flood Fringe. The flood fringe is defined as that land area which is outside a stream's floodway, but is subject to periodic inundation due to flooding, associated with a regulatory flood.

Section 38: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.370 Designation and Mapping of Frequently Flooded Areas. All areas within the city meeting the frequently flooded designation criteria in the *Identification and Delineation Manual*, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this Chapter. The approximate location and extent of frequently flooded areas are shown on the pertinent city critical area map. This map is to be used as a guide for the city, project applicants, and property owners, and will be periodically updated as new information becomes available. This map is a reference and does not provide a final critical area designation. Frequently flooded areas have been accurately delineated based on hydrologic and hydraulic studies completed as part of the National Flood Insurance Program by the Federal Emergency Management Agency in May 1981, as amended. The methodology and detail of these studies is accepted as the best available science.

Section 39: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.380 Existing Regulations Pertaining to Frequently Flooded Areas. Chapter 17.100 of the Pullman City Code regulates proposed activities adjacent to or within frequently flooded areas. If allowed, any structures permitted in the designated flood areas are subject to strict flood-proofing regulations. The existing regulations were put in place after careful study and fulfill the requirements of the Growth Management Act for protection of frequently flooded areas.

Section 40: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.390 Designation of Geologically Hazardous Areas. Geologically hazardous areas include areas susceptible to erosion, sliding, earthquake, or other geological events. They pose a threat to the health and safety of citizens when incompatible development is sited in areas of significant hazard. Such incompatible development may not only place itself at risk, but also may increase the hazard to surrounding development and use. Areas susceptible to one or more of the following types of hazards shall be designated as a geologically hazardous area:

(1) erosion hazard;

(2) landslide hazard;

(3) seismic hazard;

(4) mine hazard;

(5) volcanic hazard; and

(6) other geological events including mass wasting, debris flows, rock falls, and differential settlement.

Section 41: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.400 Designation of Specific Hazard Areas.

(1) Erosion Hazard Areas. Erosion hazard areas are those areas identified by the U.S. Department of Agriculture - Natural Resources Conservation Service (USDA-NRCS) as having a "moderate to severe," "severe," or "very severe" rill and inter-rill erosion hazard. Rill erosion tends to occur on slopes, particularly steep slopes with easily-erodable soils or poor vegetation. Erosion hazard areas also include those areas with a slope greater than 15 percent.

(2) Landslide Hazard Areas. Landslide hazard areas are areas potentially subject to landslides based on a combination of geologic, topographic, and hydrologic factors. They include areas susceptible because of any combination of bedrock, soil, slope (gradient), slope aspect, structure, hydrology, or other factors. Example of these may include, but are not limited to the following:

(a) areas of historic failures, such as:

(i) those areas delineated by the USDA-NRCS as having a "severe" limitation for building site development for factors other than slope for one or more types of building development;

(ii) those areas mapped by the Department of Natural Resources (slope stability mapping) as unstable ("U" or class 3), unstable old slides ("UOS" or class 4), or unstable recent slides ("URS" or class 5); or

(iii) areas designated as quaternary slumps, earthflows, mudflows, lahars, or landslides on maps published by the U.S. Geological Survey or Department of Natural Resources;

(b) areas with all three of the following characteristics:

(i) slopes steeper than 15 percent;

(ii) hillsides intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock; and

(iii) springs or ground water seepage;

(c) areas that have shown movement during the Holocene epoch (from 10,000 years ago to the present) or that are underlain or covered by mass wastage debris of that epoch;

(d) slopes that are parallel or subparallel to planes of weakness (such as bedding planes, joint systems, and fault planes) in subsurface materials;

(e) slopes having gradients steeper than 80 percent subject to rock fall during seismic shaking;

(f) areas potentially unstable because of rapid stream incision, stream bank erosion, and undercutting by wave action;

(g) areas that show evidence of, or are at risk from snow avalanches;

(h) areas located in a canyon or on an active alluvial fan, presently or potentially subject to inundation by debris flows or catastrophic flooding; and

(i) any area with a slope of 40 percent or steeper and with a vertical relief of ten or more feet except areas composed of consolidated rock.

(3) Seismic Hazard Areas. Seismic hazard areas are areas subject to severe risk of damage as a result of earthquake induced ground shaking, slope failure, settlement, soil liquefaction, lateral spreading, or surface faulting. One indicator of potential for future earthquake damage is a record of earthquake damage in the past. Ground shaking is

the primary cause of earthquake damage in Washington. The strength of ground shaking is primarily affected by:

(a) the magnitude of an earthquake;

(b) the distance from the source of an earthquake;

(c) the type of thickness of geologic materials at the surface; and

(d) the type of subsurface geologic structure.

Settlement and soil liquefaction conditions occur in areas underlain by cohesionless, loose, or soft-saturated soils of low density, typically in association with a shallow ground water table.

(4) Mine Hazard Areas. Mine hazard areas are those areas underlain by, or affected by mine workings such as adits, gangways, tunnels, drifts, or airshafts, and those areas of probable sink holes, gas releases, or subsidence due to mine workings. Steep and unstable slopes may be created by open mines (e.g. open basalt rock pits, rock quarries, sand and gravel pits). Factors that should be considered include: proximity to development, depth from ground surface to the mine working, and geologic material.

(5) Volcanic Hazard Areas. Volcanic hazard areas are areas subject to pyroclastic flows, lava flows, debris avalanche, inundation by debris flows, lahars, mudflows, or related flooding resulting from volcanic activity.

(6) Other Hazard Areas. Geologically hazardous areas shall also include areas determined by the planning director to be susceptible to other geological events including mass wasting, debris flows, rock falls, and differential settlement.

Section 42: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.410 Classification of Geologically Hazardous Areas. The level of risk for each geologic hazard type is described in this Section. Documentation of specific areas in which a known or suspected risk exists for each of the following hazard areas is provided in the pertinent city critical area map. The provisions of this title apply only to those areas for which a known or suspected risk exists.

Classification	Documentation and Data Sources
Known or Suspected Risk	Documentation or projection of the hazard by a qualified professional exists.
Low or No Risk	Documentation exists by a qualified professional regarding low hazard risk or lack of hazard.
Risk Unknown	Documentation, data, or projection of the hazard risk by a qualified professional are not available or sufficient to determine the presence or absence of a geologic hazard.

(1) Erosion Hazard Areas - Known or Suspected Risk. The Thatuna Soil Series within the city is identified as having a potentially severe erosion hazard. The Thatuna Series within the city consists of: the Thatuna Silt Loams on slopes of 7 to 25 percent and 25 to 40 percent and the Thatuna-Tilma Silt Loams on slopes of 7 to 25 percent.

Soil Series Name	Slope (%)	Erosion Hazard
Thatuna Silt Loam	7 -25	Moderate to Severe
Thatuna Silt Loam	25 - 40	High to Severe
Thatuna-Tilma Silt Loams	7 - 25	Moderate to Severe

(2) Landslide Hazard Areas - Known or Suspected Risk. Areas of severe limitations to building development as identified by the USDA-NRCS for reasons other than slope for one or more types of building development include the soil series in the following table.

Soil Name	Not Level Roads		
	Dwellings w/o Basements	Dwellings w/ Basements	Small Commercial Buildings
Caldwell	Severe: floods	Severe: floods, wetness	Severe: floods
Garfield	Severe: shrink-swell, low strength	Severe: shrink-swell, low strength	Severe: shrink-swell, low strength
Gwin-Tucannon	Severe: slope	Severe: depth to rock, slope	Severe: slope
Konert	Severe: floods, wetness, shrink-swell	Severe: floods, wetness, shrink-swell	Severe: floods, wetness, shrink-swell
Latah	Severe: floods, wetness, shrink-swell	Severe: floods, wetness, shrink-swell	Severe: floods, wetness, shrink-swell
Naff	Severe: slope, shrink-swell	Severe: slope, shrink-swell	Severe: slope, shrink-swell
Thatuna-Tilma	Severe: shrink-swell, slope, wetness	Severe: wetness, shrink-swell, slope	Severe: shrink-swell, wetness, slope
Tucannon	Severe: slope	Severe: depth to rock, slope	Severe: slope

(3) Seismic Hazard Areas - Low or No Risk. All of Whitman County is identified in the Uniform Building Code (UBC Ch. 16, Sec. 1626) as being located within Zone 2B (Zone 0: lowest - Zone 4: highest) of the Seismic Zone map of the United States. There are no known specific faults that are likely to create a seismic hazard within the city. The combination of these two factors results in low to no seismic risk for the city.

(4) Mine Hazard Areas - Known or Suspected Risk. No subsurface mines exist in the city. Open mines such as basalt rock pits and sand/gravel pits that exist within the city are mine hazard areas.

(5) Volcanic Hazard Areas - Low or No Risk. Pullman is not located within a volcanic hazard zone. If a volcanic eruption were to occur in the western part of Washington, the only anticipated impact in Pullman would be ash deposition.

(6) Other Hazard Areas. Other geologically hazardous areas may be designated by the planning director if documentation thereof is available.

Section 43: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.420 Mapping of Geologically Hazardous Areas.

(1) The approximate location and extent of potential geologically hazardous areas are shown in the pertinent city critical area map. The hazard areas outlined on this map are based on the following data:

(a) Department of Natural Resources slope stability maps (slope);

(b) USGS 10-meter Digital Elevation Model (slope);

(c) USDA-NRCS Soil Survey of Whitman County, Washington: WA075/Sheet 99/109 (soil type);

(d) Uniform Building Code Ch. 16, Sec. 1626 (seismic hazard);

(e) additional data as determined necessary by the city.

(2) The city critical area map regarding geologically hazardous areas is to be used as a guide for the city, project applicants, and property owners, and will be periodically updated as new information becomes available. This map provides a general reference and does not provide a final critical area designation.

Section 44: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.430 Existing Regulations Pertaining to Geologically Hazardous Areas. The following regulations and procedures are in place for the city to minimize the undesirable impacts that could be associated with geologically hazardous areas:

(1) Erosion Hazard Areas.

UBC Chapter 33: Excavation and Grading. Building Permit Inspections.

City of Pullman Design Standards.

(2) Landslide Hazard Areas.

UBC Chapter 18: Excavations, Foundations and Retaining Walls.

UBC Chapter 33: Excavation and Grading. Building Permit Inspections.

City of Pullman Design Standards.

City of Pullman Policy Regarding Footings and Soil Types.

City of Pullman Design Guidelines for Typical Residential Footings on Poor Soils.

(3) Seismic Hazard Areas.

UBC Chapter 16, Section 1626: Earthquake Regulations.

(4) Mine Hazard Areas.

Chapter 17.125 Pullman City Code: Conditional Use Permit.

Chapter 78.44 RCW - Surface Mining.

(5) Volcanic Hazard Areas.

None necessary.

Section 45: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.440 Designation and Mapping of Habitat Conservation Areas.

(1) Designation. Fish and wildlife habitat conservation areas include the following:

(a) Areas with which State or Federally Designated Endangered, Threatened, and Sensitive Species Have a Primary Association.

(i) Federally designated endangered and threatened species are those fish, wildlife and plant species identified by the U.S. Fish and Wildlife Service or the National Marine Fisheries Service that are in danger of extinction or threatened to become endangered. The U.S. Fish and Wildlife Service and the National Marine Fisheries Service should be consulted as necessary for current listing status.

(ii) State designated endangered, threatened, and sensitive species are those fish and wildlife species native to the state of Washington identified by the state Department of Fish and Wildlife, and those native plant species identified by the Department of Natural Resources, that are in danger of extinction, threatened to become endangered, vulnerable, or declining and are likely to become endangered or threatened in a significant portion of their range within the state without cooperative management or removal of threats. State designated endangered, threatened, and sensitive

species are periodically recorded in WAC 232-12-014 (state endangered species), and WAC 232-12-011 (state threatened and sensitive species). The state Department of Fish and Wildlife maintains the most current listing and should be consulted as necessary for current listing status.

(iii) A combined list of federally and state identified species having the potential to exist within the city is maintained by the Pullman planning department.

(b) State Priority Habitats and Areas Associated with State Priority Species. Priority habitats and species are considered to be priorities for conservation and management. Priority species require protective measures for their perpetuation due to their population status, sensitivity to habitat alteration, and/or recreational, commercial, or tribal importance. Priority habitats are those habitat types or elements with unique or significant value to a diverse assemblage of species. A priority habitat may consist of a unique vegetation type or dominant plant species, a described successional stage, or a specific structural element. Priority habitats and species are identified by the state Department of Fish and Wildlife. A state list of priority habitats is maintained by the Pullman planning department.

(c) Habitats and Species of Local Importance. Habitats and species of local importance are those identified by the city, including those that possess unusual or unique habitat warranting protection because of qualitative species diversity or habitat system health indicators, such as high quality native plant communities, and those with historical or cultural importance.

(d) Naturally Occurring Ponds Under 20 Acres. Naturally occurring ponds are those ponds under 20 acres and their submerged aquatic beds that provide fish or wildlife habitat, including those artificial ponds intentionally created from dry areas in order to mitigate impacts to ponds. Naturally occurring ponds do not include ponds deliberately designed and created

from dry sites, such as canals, detention facilities, wastewater treatment facilities, farm ponds, temporary construction ponds, and landscape amenities, unless such artificial ponds were intentionally created for mitigation.

(e) Waters of the State. Waters of the state includes lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington, as classified in WAC 222-16-031.

(f) Lakes, Ponds, Streams, and Rivers Planted with Game Fish by a Governmental or Tribal Entity.

(g) State Natural Area Preserves and Natural Resource Conservation Areas. Natural area preserves and natural resource conservation areas are defined, established, and managed by the state Department of Natural Resources.

(h) Land Essential for Preserving Connections Between Habitat Blocks and Open Spaces.

All areas within the city meeting one or more of the above criteria, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this Chapter. The planning director shall be responsible for making final habitat conservation area designations within the city.

(2) Mapping. The approximate location and extent of habitat conservation areas are shown on the pertinent city critical area map. The following maps are also hereby adopted to provide geographic information about known or suspected habitat conservation areas:

(a) Department of Fish and Wildlife Priority Habitat and Species Maps;

(b) Department of Natural Resources, Official Water Type Reference Maps, as amended;

(c) resident salmonid distribution maps contained in the Habitat Limiting Factors Reports published by the Washington Conservation Commission;

(d) Department of Natural Resources State Natural Area Preserves and Natural Resource Conservation Area Maps; and

(e) city habitat maps.

These maps are to be used as a guide for the city, project applicants, and property owners, and will be periodically updated as new information becomes available. They are a reference and do not provide a final critical area designation.

Section 46: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.450 Habitat Conservation Areas Critical Area Report–Additional Requirements.

(1) Areas Addressed in Report. The following areas shall be addressed in a critical area report for habitat conservation areas:

(a) the project area of the proposed activity;

(b) all habitat conservation areas and recommended buffers within 200 feet of the project area; and

(c) all shoreline areas, flood plains, and other critical areas, and related buffers within 200 feet of the project area.

(2) Habitat Assessment. A critical area report for a habitat conservation area shall contain an assessment of habitats including the following site- and proposal-related information at a minimum:

(a) a detailed description of vegetation on and adjacent to the project area;

(b) identification of any species of local importance, priority species, or endangered, threatened, sensitive or candidate species that have a primary association with habitat on or adjacent to the project area, and assessment of potential project impacts to the use of the site by the species;

(c) a discussion of any federal, state, or local special management recommendations, including Department of Fish and Wildlife habitat management recommendations, that have been developed for species or habitats located on or adjacent to the project area;

(d) a discussion of measures, including avoidance, minimization, and mitigation, proposed to preserve existing habitats and restore any habitat that was degraded prior to the current proposed land use activity and to be conducted in accordance with Section 16.50.160; and

(e) a discussion of ongoing management practices that will protect habitat after the project site has been developed, including proposed monitoring and maintenance programs.

(3) Additional Information. When appropriate due to the type of habitat or species present or the project area conditions, the planning director may also require the critical area report to include:

(a) an evaluation by the Department of Fish and Wildlife or qualified expert regarding the applicant's analysis and the effectiveness of any proposed mitigating measures or programs, to include any recommendations as appropriate; and

(b) detailed surface and subsurface hydrologic features both on and adjacent to the site.

Section 47: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.460 General Requirements Pertaining to Habitat Conservation Areas.

(1) Alterations Shall Not Degrade the Functions and Values of Habitat. A habitat conservation area may be altered only if the proposed activity, including associated mitigation measures, does not degrade the quantitative and qualitative functions and values of the habitat and other critical areas.

(2) Non-indigenous Species Shall Not Be Introduced. No plant, wildlife, or fish species not indigenous to the region shall be introduced into a habitat conservation area unless authorized by a local, state, or federal permit or approval.

(3) Mitigation Shall Result in Contiguous Corridors. Mitigation sites shall be located to achieve contiguous wildlife habitat corridors in accordance with a mitigation plan that is part of the critical area report to minimize the isolating effects of development on habitat areas, so long as mitigation of aquatic habitat is located within the same aquatic ecosystem as the area disturbed.

(4) Approvals of Activities May be Conditioned. The planning director shall condition approvals of activities allowed within or adjacent to a habitat conservation area or its buffers, as necessary to minimize or mitigate any potential

adverse impacts. Conditions may include, but are not limited to, the following:

(a) establishment of buffer zones;

(b) preservation of critically important vegetation;

(c) limitation of access to the habitat area, including fencing to deter unauthorized access;

(d) seasonal restriction of construction activities;

(e) establishment of a duration and timetable for periodic review of mitigation activities; and

(f) requirement of a financial guarantee, when necessary, to ensure completion and success of proposed mitigation.

(5) Mitigation Shall Achieve Equivalent or Greater Biological Functions. Mitigation of alterations to habitat conservation areas shall achieve equivalent or greater biologic functions and shall include mitigation for adverse impacts upstream or downstream of the development proposal site. Mitigation shall address each function affected by the alteration to achieve functional equivalency or improvement on a per function basis.

(6) Approvals Shall be Supported by the Best Available Science. Any approval of alterations or impacts to a habitat conservation area shall be supported by the best available science.

(7) Buffers.

(a) Establishment of Buffers. The planning director shall require the establishment of buffer areas for activities in, or adjacent to, habitat conservation areas when needed to protect habitat conservation areas. Buffers shall consist of an undisturbed area of native vegetation, or areas identified for restoration, established to protect the integrity, functions, and values of the affected habitat. Required buffer widths shall reflect the sensitivity of the habitat and the type and intensity of human activity proposed to be conducted nearby, and shall be consistent with the management recommendations issued by the state Department of Fish and Wildlife.

(b) Seasonal Restrictions. When a species is more susceptible to adverse impacts during specific periods of the year, seasonal restrictions may apply. Larger

buffers may be required and activities may be further restricted during the specified season.

(8) Signs and Fencing of Habitat Conservation Areas.

(a) Temporary Markers. The outer perimeter of the habitat conservation area or buffer and the limits of those areas to be disturbed pursuant to a development permit shall be marked in the field in such a way as to ensure that no unauthorized intrusion will occur, and verified by the planning director prior to the commencement of permitted activities. This temporary marking shall be maintained throughout construction, and shall not be removed until permanent signs, if required, are in place.

(b) Permanent Signs. As a condition of any development permit issued pursuant to this Chapter, the planning director may require the applicant to install permanent signs along the boundary of a habitat conservation area or buffer. If required, permanent signs shall be made of a metal face and attached to a metal post, or another material of equal durability. Signs must be posted at an interval of one per lot or every 50 linear feet, whichever yields the greater amount of signs, and must be maintained by the property owner in perpetuity. The sign shall be worded as follows or with alternative language approved by the director:

"Habitat Conservation Area
Do Not Disturb
Contact City of Pullman
Regarding Uses and Restrictions"

(c) Fencing.

(i) As a condition of any development permit, the planning director may require the applicant to install a permanent fence at the edge of the habitat conservation area or buffer when fencing will prevent future impacts to the habitat conservation area.

(ii) The applicant shall be required to install a permanent fence around the habitat conservation area or buffer when domestic grazing animals are present or may be introduced on site.

(iii) Fencing installed as part of a proposed activity or as required in this Paragraph shall be designed so as to not interfere with species migration, including fish runs, and shall be constructed in a manner that minimizes habitat impacts.

(9) Subdivisions. The subdivision and short subdivision of land in habitat conservation areas and associated buffers is subject to the following:

(a) Land that is located wholly within a habitat conservation area or its buffer may not be subdivided.

(b) Land that is located partially within a habitat conservation area or its buffer may be divided provided that an accessible and contiguous portion of each new lot:

(i) is located outside of the habitat conservation area and its buffer; and

(ii) meets the minimum lot size requirements of city's zoning code (Title 17).

(c) Access roads and utilities serving a proposed subdivision or other property may be permitted within the habitat conservation area and associated buffers only if the planning director determines that no other feasible alternative exists and these facilities are otherwise established consistent with the provisions of this Chapter.

Section 48: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.470 Development Standards for Specific Species or Habitats.

(1) Endangered, Threatened, and Sensitive Species.

(a) No development shall be allowed within a habitat conservation area or buffer with which state or federally endangered, threatened, or sensitive species have a primary association.

(b) Whenever activities are proposed adjacent to a habitat conservation area with which state or federally endangered, threatened, or sensitive species have a primary association, such area shall be protected through the application of protection measures in accordance with a critical area report prepared by a qualified professional and submitted to the planning

director. Approval for alteration of land adjacent to the habitat conservation area or its buffer shall not occur prior to consultation with the Department of Fish and Wildlife and the appropriate federal agency.

(c) Bald eagle habitat shall be protected pursuant to the Washington State Bald Eagle Protection Rules (WAC 232-12-292). Whenever activities are proposed adjacent to a verified nest territory or communal roost, a habitat management plan shall be developed by a qualified professional. Activities are adjacent to bald eagle sites when they are within 800 feet, or within one-quarter mile (1,320 feet) and in a shoreline foraging area. The planning director shall verify the location of eagle management areas for each proposed activity. Approval of the activity shall not occur prior to approval of the habitat management plan by the Department of Fish and Wildlife.

(2) Wetland Habitats. All proposed activities within or adjacent to habitat conservation areas containing wetlands shall, at a minimum, conform to the wetland standards set forth in Sections 16.50.250 through 16.50.290, in addition to meeting the habitat conservation area standards in Sections 16.50.440 through 16.50.470.

(3) Riparian Habitat Areas.

(a) Activities Shall Not Degrade the Functions and Values of Riparian Habitat. A proposed activity may only be permitted in a riparian habitat area if the applicant can show that the activity, including associated mitigation measures, will not degrade the functions and values of the riparian habitat area and other critical areas.

(b) Riparian Habitat Area Widths. Recommended riparian habitat area widths are shown in the table below. A riparian habitat area shall have the width recommended, unless it is adjusted pursuant to Paragraphs 16.50.470(3)(c). Widths shall be measured outward, on the horizontal plane, from the ordinary high water mark or from the top of bank if the ordinary high water mark cannot be identified. Riparian areas should be sufficiently wide to achieve the full range of riparian and aquatic ecosystem functions, which include but are not limited to

protection of instream fish habitat through control of temperature and sedimentation in streams; preservation of fish and wildlife habitat; and connection of riparian wildlife habitat to other habitats.

Riparian Habitat Areas	
Stream Type	Recommended RHA Width
Types 1 and 2 -- shorelines of statewide significance	150 feet
Type 3 or other perennial or fish bearing streams (South Fork of Palouse River, Missouri Flat Creek, Sunshine Creek, Paradise Creek, Dry Fork Creek, and Airport Road Creek)	75 feet
Types 4 and 5	50 feet

(c) Increased Riparian Habitat Area Width. The recommended riparian habitat area width shall be increased, as follows:

(i) when the planning director determines that the recommended width is insufficient to prevent habitat degradation and to protect the structure and functions of the habitat area;

(ii) when the frequently flooded area exceeds the recommended riparian habitat area width, the riparian habitat area shall extend to the outer edge of the frequently flooded area;

(iii) when the channel migration zone exceeds the recommended riparian habitat area width, the riparian habitat area shall extend to the outer edge of the channel migration zone; and/or

(iv) when the habitat area is in an area of high blowdown potential, the riparian habitat area shall be expanded an additional 50 feet on the windward side.

(d) Riparian Habitat Mitigation. Mitigation of adverse impacts to riparian habitat areas shall result in equivalent functions and values, on a per function

basis, and be located in the same sub-drainage basin as the habitat impacted.

(e) Alternative Mitigation for Riparian Habitat Areas. The requirements set forth in this Section may be modified at the planning director's discretion if the applicant demonstrates that greater habitat functions, on a per function basis, can be obtained in the affected sub-drainage basin as a result of alternative mitigation measures.

(f) Standards for Specific Activities in Riparian Habitat Areas. In addition to the general review procedures set forth in Section 16.50.130 and other applicable provisions of this Chapter, the standards below apply to specific activities proposed to be located within a riparian habitat area to ensure maintenance or enhancement of the functions and values of the affected habitat area.

(i) Clearing and Grading. Clearing and grading operations shall comply with the following standards:

(aa) grading shall be conducted only when soil conditions are dry and the potential for erosion is low;

(bb) filling or modification of a wetland or wetland buffer is permitted only if it is conducted as part of an approved wetland alteration;

(cc) the soil duff layer shall remain undisturbed to the maximum extent possible, and where feasible, any soil disturbed shall be redistributed to other areas of the project area;

(dd) the moisture-holding capacity of the topsoil layer shall be maintained by minimizing soil compaction or reestablishing natural soil structure and infiltrative capacity on all areas of the project area not covered by impervious surfaces; and

(ee) erosion and sediment control that meets or exceeds the standards set forth in

the adopted stormwater management regulations shall be provided.

(ii) Shoreline Erosion Control Measures. New, replacement, or substantially improved shoreline erosion control measures shall maintain natural shoreline processes such that the project will not result in increased erosion or alterations to, or loss of, shoreline substrate within one-quarter mile (1,320 feet) of the project area.

(iii) Streambank Stabilization. Streambank stabilization to protect new structures from future channel migration shall be achieved through bioengineering or soft armoring techniques wherever possible.

(iv) Roads, Trails, and Bridges. Construction of trails, roadways, and road bridges shall comply with the following standards:

(aa) the applicant shall demonstrate that there is no feasible alternative route with less impact on the environment, or that functions or values of the riparian habitat area would be enhanced by the project;

(bb) any crossings shall minimize interruption of downstream movement of wood and gravel;

(cc) road bridges shall be designed according to the Department of Fish and Wildlife *Fish Passage Design at Road Culverts*, March 1999, and the National Marine Fisheries Service *Guidelines for Salmonid Passage at Stream Crossings*, 2000; and

(dd) use of impervious materials for trails and associated viewing platforms shall be minimized.

(v) Utility Facilities. New utility lines and facilities shall comply with the following standards:

(aa) fish and wildlife habitat areas shall be avoided to the maximum extent possible;

(bb) installation of utilities across watercourses shall be accomplished by boring beneath the scour depth and hyporheic zone of the water body and channel migration zone, where feasible;

(cc) utilities shall cross at an angle greater than 60 degrees to the centerline of the channel in streams or perpendicular to the channel centerline whenever boring under the channel is not feasible;

(dd) crossings shall be contained within the footprint of an existing road or utility crossing where possible;

(ee) the utility route shall avoid paralleling the stream or following a down-valley course near the channel; and

(ff) the utility installation shall not increase or decrease the natural rate of shore migration or channel migration.

(vi) Public Flood Protection Measures. New public flood protection measures and expansion of existing ones may be subject to the approval of a Federal Biological Assessment by the federal agency responsible for reviewing actions related to a federally listed species.

(vii) In-stream Facilities. In-stream facilities, such as, but not limited to, high flow bypasses, sediment ponds, in-stream ponds, tide gates, dams, and weirs, may be allowed only as part of an approved watershed basin restoration project approved by the city and upon acquisition of any required state or federal permits. The structures shall be designed to avoid modifying flows and water

quality in ways that may adversely affect habitat conservation areas.

(viii) Stormwater Conveyance Facilities. Stormwater conveyance structures shall comply with the following standards:

(aa) the applicant shall demonstrate that no feasible alternatives with less impact exist;

(bb) the structures shall incorporate fish habitat features; and

(cc) vegetation shall be maintained and, if necessary, added adjacent to all open channels and ponds in order to retard erosion, filter out sediments, and shade the water.

(ix) On-Site Sewage Systems and Wells. On-site sewage systems and wells shall comply with the following standards:

(aa) new individual wells and on-site sewage systems may be allowed only if accessory to an approved residential structure for which it is not feasible to connect to a public water or sanitary sewer system; and

(bb) repairs to failing on-site sewage systems associated with an existing structure shall be accomplished by one of the following methods that results in the least impact to the environment: connection to an available public sanitary sewer system; replacement with a new on-site sewage system located in a portion of the site that has already been disturbed by development and is located landward as far as possible, provided the proposed sewage system is in compliance with the Whitman County Health Department; or repair of the existing on-site septic system.

Section 49: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.480 Agricultural Land–Designation. There is no agricultural land of long-term commercial significance within the city. All existing agricultural use of property is classified as a nonconforming use, and the underlying land is zoned for urban uses and densities.

Section 50: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.490 Forest Land--Designation. There is no forest land of long-term commercial significance within the city.

Section 51: There is hereby added a new section to Chapter 16.50 of the Pullman City Code to read as follows:

16.50.500 Mineral Resource Land--Designation. There is no mineral resource land of long-term commercial significance within the city. Mining is allowed in the I1 and I2 zone districts as a conditional use, but this activity is not considered to have long-term commercial significance.

SECTION 52 Repealer: Pullman City Ordinance No. 92-28, adopted September 1, 1992, is hereby repealed.

Section 53: Effective Date. This Ordinance, being an exercise of a power specifically delegated to the City legislative body, is not subject to referendum, and shall take effect five (5) days after passage and publication of an approved summary thereof consisting of the title.

PASSED by the City Council of the city of Pullman at a regular meeting held on the 10th day of June, 2003.

SIGNED by the Mayor in Authentication and Approval Thereof on the 11th day of June, 2003.

Mayor

ATTEST:

Finance Director

Approved as to Form:

City Attorney

Summary Published: June 14, 2003

FILED

JUN 11 2003

CITY CLERK'S OFFICE
PULLMAN, WASHINGTON